NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

DECIDING WHO LIVES: CONSIDERED RISK CASUALTY DECISIONS IN HOMELAND SECURITY

by

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December 2008

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1. AGENCY USE ONLY *(Leave blank)*

2. REPORT DATE
December 2008

3. REPORT TYPE AND DATES COVERED
Master's Thesis

4. TITLE AND SUBTITLE Deciding Who Lives: Considered Risk Casualty Decisions in Homeland Security

5. FUNDING NUMBERS

6. AUTHOR(S) Robert T. Mahoney

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Naval Postgraduate School
Monterey, CA 93943-5000

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES)
N/A

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited

12b. DISTRIBUTION CODE
A

13. ABSTRACT (maximum 200 words)

Homeland security was changed by the events of September 11, 2001, including how we make life and death decisions. Terrorism, all hazards, and public health issues increase the number of decisions involving the expenditure of civilian lives. These Considered Risk Casualties are akin to the military concept of "acceptable losses." Homeland security professionals have little or no experience, let alone guidance, in decision making under circumstances that bring this condition to the civilian population.

Other disciplines such as philosophy, theology, bioethics, and the military, etc. have examined principles that are involved in the concept of accepting loss of life and have identified theoretical circumstances under which acceptance is achieved. Homeland security has had little discussion of these matters and virtually no criteria to support such decision making. Examining the observations, and how those disciplines test the concept, can inform and assist homeland security practitioners when having to make these decisions.

Examining homeland security events that addressed loss of life can expand the range of scenarios those disciplines use for their analysis. An educational process that draws on other sectors' experience can serve to improve decision-making capabilities. Future research opportunities exist within and external to homeland security and those disciplines'

14. SUBJECT TERMS Considered Risk Casualty; Acceptable Losses; Bioethics; Philosophy; Theology; Military; Homeland Security; Decision-making; Emergency Services.

15. NUMBER OF PAGES
205

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	**18. SECURITY CLASSIFICATION OF THIS PAGE**	**19. SECURITY CLASSIFICATION OF ABSTRACT**	**20. LIMITATION OF ABSTRACT**
Unclassified	Unclassified	Unclassified	UU

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

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EXECUTIVE SUMMARY

On September 11, 2001, government officials made a decision to shoot down an occupied, commercial airliner that had been hijacked by terrorists. The government Centers for Disease Control and Prevention has promulgated a plan that distributes scarce pandemic vaccine to a series of prioritized individuals. What both these matters have in common is that the government has made decisions that will result in the death of some citizens in order to benefit others. Such situations are similar to conditions that exist within the military concept of "acceptable losses," i.e., to achieve a desirable objective, it is sometimes necessary to expend lives and/or property. Throughout history, within varying limits, there has been a societal tolerance for that concept in military matters. There is no concomitant understanding for such a concept being applied within civilian circumstances.

Current and ongoing threats from terrorism and severe natural disasters have focused attention on the status of emergency services across the nation. Police, fire, and emergency medical services are part of the homeland security resources and capabilities. The resources of these agencies are finite and some of the most valuable and necessary in the country. The types of situations described above, that have previously been associated with war and the battlefield, are now the types of events that will be encountered by homeland security managers. They will be required to make decisions that lead to there being Considered Risk Casualties (injury, death, and/or destruction of property among the civilian population as an anticipated, but unintended consequence of a decision). In short, they will be deciding, in a wide range of situations, who will survive, and as on September 11, this may involve significant numbers of people. Those civilian, homeland security decision makers need to be supported and prepared for making such decisions.

Set criteria that establish the level of losses that are permissible for particular types of objectives do not exist in this country. However, other disciplines outside the military and homeland security have long, in some cases for centuries, examined, discussed, and researched the various conditions under which deaths of innocent individuals can be tolerated. Philosophy, theology, and bioethics are just some of the

disciplines that have a rich history of analysis and pronouncements about such situations. By reviewing the range of topics discussed in these other disciplines, such as the difference between killing and letting die, harming some to save others, rationing scarce resources, treatment decisions in the SARS epidemic, and theological maxims such as the Principle of Double Effect, one can establish a direct corollary to homeland security decision making. The analyzing of multiple, actual Considered Risk Casualty events and describing the decision factors considered by the decision makers themselves, establishes a relationship between the abstract observations of the other disciplines, and actual command decisions in homeland security.

The American military has a practiced process for preparing personnel to address these types of decisions, but in both the military and civilian homeland security realms, these decisions depend on the experience and integrity of the individual decision maker. Experience and integrity vary substantially between individuals, potentially creating decisions and outcomes that can be dramatically different even for similar circumstances. In order to reduce the levels of variance that naturally exist between homeland security decision makers and to assist them in these most consequential decisions and circumstances, it is recommended that an educational program that draws upon the wealth of knowledge that exists in the humanities and social sciences, and that directly relates to Considered Risk Casualty decisions be developed. Educating homeland security personnel in the abstract observations of these other disciplines can serve to provide a level of experiences beyond that of a single individual, and help inform the decision maker in times of Considered Risk Casualty conditions. Indeed, the traditional emergency service concepts of duty and response requirements around which all planning and operations are based and that are being re-evaluated in the face of these new threats, can be served by such an educational program.

Conversely, providing the other disciplines with an understanding of the actual conditions under which Considered Risk Casualty decisions are required, can enhance the range of circumstances and factors that serve as the basis of their discussions which are now largely limited to abstractions. Establishing such a relationship between these other disciplines and homeland security will bring mutual benefit to both entities.

ACKNOWLEDGMENTS

The experiences that have given rise to the thoughts that evolved into this thesis have been acquired in six different decades of responding to other people's emergencies and a few of my own. The concepts and situations that are examined here are commonly recognized, occasionally understood, and rarely agreed upon. I have drawn on the considerable intellect of many people from an array of disciplines and from the experiences and beliefs of scores of others to give form and voice to my own observations on a topic with inherent sensitivities. If I have taken these thoughts and experiences of others to locations they had not intended or imagined, then in addition to apologizing, I can only hope that they appreciate arriving in a new location as much as I have enjoyed the opportunity and journey of arriving there myself.

I would like to thank and acknowledge those who have brought this effort to completion: my thesis advisor, Glen Woodbury for his friendly advice, support, and encouragement that this topic could, should, and would be written about; my thesis co-adviser, Robert Josefek who's cogent and calm recommendations transformed a few bits of logic spinning in a sea of intuition into an academic process. I must also thank each of my classmates and instructors at the Center for Homeland Security and Defense who gave me endless opportunities to say something about topics I had just discovered by listening to them. I particularly want to thank my wife, children, family, and friends from whom I took the time, motivation, and strength to complete this project. Thank you all.

This thesis and its topic are dedicated to the September 11th heroes, both living and deceased, and particularly to those who responded and will continue to respond there again every day for the rest of their lives. They know what I mean.

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I.   INTRODUCTION

Due to the enormous cost of anti-terror efforts -- difficult issues and trade-offs arise concerning cost-effectiveness, diminishing returns and levels of 'acceptable losses.

(Perl, 2006)

It was like the wave of water that cleaves and moves around both sides of the bow of a ship and joins together again once the boat has continued on its course. It was only a few minutes after the second plane had hit the south tower of the World Trade Center, and I was moving with another manager from our office through the sea of people moving north on Church Street away from the unfolding horror a scant few blocks behind them. We were wearing our blue "raid jackets" with the large, block, yellow letters FBI across the back, front and on the sleeves. Moving against this human tide should have been difficult, but we moved unimpeded, for as we approached them and they noticed the letters on the jacket, they immediately parted like that wave to permit us to continue our advance. The expressions on their faces and particularly the looks in their eyes are part of a plethora of images that were being etched in my memory, and although I didn't know it at the time, they were but the beginning of many more to come in the minutes, hours, days, and months that followed. Mostly, those eyes seemed reassured that someone was responding, and that resources known about but taken for granted in normal times, were moving in to take a position between them and the death and destruction they were escaping.

We were not alone in our a southbound movement, for sharing the street with us was an endless line of, fire engines, police cars, ambulances, and other official and emergency vehicles of every description, size, and purpose that the city of New York could dispatch. On an average weekday morning the sound of cars, taxis, buses, trucks and other vehicles that supply the transportation and commercial requirements for the very core of the world's capitalist engine, create a backdrop of sound that is as permanent and familiar as the sound of your own breathing; but not on this morning.

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There was only the sound of the sirens from these massing emergency vehicles, and it came from all directions simultaneously. No, I was not alone by any means in my movement toward the Trade Center, and although I did not realize it then, we were all moving towards decisions of life and death, both professional and personal, that would change our lives forever.

It is hard to imagine, but in the middle of all that movement, for a moment a firefighter sitting in the jump seat of one of those trucks passing on my right, locked glances with me. Possibly we sought each other out in some odd comradeship of those who were moving towards the problem as opposed to the thousands who are moving away from it, but nevertheless, at that moment we looked at each other and I saw that mixture of concern and commitment that would become a recognizable, universal expression in the minutes and months that followed. With that look, the thought came to me, "They're riding to their death and they know it," never thinking that I might also be walking towards mine. I looked straight up over me nearly a quarter of a mile high at the huge hole in the face of the North Tower, at the raging fires and smoke, and at the people you could see at the windows on the upper floors, and thought about the risk to all those firefighters and others going to their rescue. Owing to a past relationship with the New York City Fire Department I knew that the previous single largest loss of life in their ranks had been 12 men killed in a 1966 fire. My second thought was, "They could lose three or four times that many here." In spite of the horror I was seeing, and even my inexplicable counting of the people falling down the face of those buildings, I, and the other hundreds of people heading towards that site, would have had to untie the bonds of civilization to imagine that the actual loss in emergency service personnel would be more than 30 times that previous record.

Simultaneously with the events unfolding in Manhattan, other horrific scenes were occurring elsewhere over the United States. At the Pentagon, just as in New York, there was no or scant warning of imminent crisis on that morning but once the incident occurred, hundreds of individuals responded as they had been trained to do and acted according to that training, instincts, or both, and were to come to the realization either on the spot, or years later, how much the decisions they made, many without long

consideration, would have life and death consequences. Those consequences were not only for others but for themselves too. Unlike the World Trade Center where the responders came with a set of principles, methods, and ethos that framed their decisions and actions into a fairly consistent process, at the Pentagon people from different disciplines, the emergency services and the military, met at the scene of a common threat and with a common intention, saving lives. Their different disciplines however, would very shortly take them in different directions.

Thousands of feet over western Pennsylvania a random group of airline passengers realized that they had a choice to make, a life-and-death choice. They made a decision that selected life but had the opposite outcome. What they did not realize at the time was that the choice had already been made for them in two places, the cockpit of their plane, and hundreds of miles away from them in the chambers below the White House. They had been out-voted in both locations. The terrorists at the controls had decided, just as the terrorists in those other planes had, that all the people onboard these planes were going to die. What the passengers over Pennsylvania did not know was that in their case, government officials had also reached the same conclusion. The risk to the country represented by the fourth hijacked airplane, in light of the events elsewhere that morning, had been carefully considered, and the passengers on that flight were to share the same outcome as the firefighter passing me mere minutes and blocks from his fate.

That morning a handful were intent on taking lives, thousands were intent on saving them, but in both cases lives would be traded for lives, thousands would be lost and many more thousands would be saved, and in the polar opposites of that equation, decisions would be made that would eventually lead to the selected outcomes. Thousands of people would become Considered Risk Casualties as a result of the intent to kill or the intent to save, and those of us who remain would be forced to consider how in the space of the next 90 minutes of September 11, 2001, a spectrum of events would forever change the way we think about life, death, and the relationship to both the simple and complex decisions that determine who lives, and who dies.

Undergoing this experience served as the author's impetus for this thesis.

A.   DISCUSSION

Various homeland security directives and policies define the criteria for standards of ability and organizational process for response and recovery in catastrophic attacks and natural hazards. Those standards define capabilities required to successfully address a catastrophe, and the structural partnerships that enable effective command and control when committing the necessary resources to manage a crisis. They do not address the question of whether or not those resources should be committed to the crisis. In particular, they do not address the concept of "Considered Risk Casualties" in the decision-making process to commit such resources to circumstances where they are overmatched, or their use would be counterproductive on a risk versus rewards scale.

In the military, the cost of achieving an objective in war requires an expenditure of personnel and materiel. Understanding the equation between achieving a campaign's objective and the losses incurred to do so, is contained in the military concept commonly understood as "acceptable losses." In planning military operations this issue is a conscious, if ill-defined, calculus that can be applied for military or civilian lives and property, or for both.

Traditionally, in this country, the execution of that concept exists only with the military; there is no concomitant concept within the civilian population. The lessons of September 11, 2001, require a re-examination of that condition. A conscious decision on the part of government agencies or executives to take actions that expend lives or to restrict the application of critical, finite resources, even at the expense of life, in order to husband those resources for the benefit of the wider population over the course of the war on terror or other crisis circumstances, is a condition that is in need of analysis. Identifying the range of factors that could contribute to the homeland security/emergency managers' depth of knowledge that forms the basis for making such decisions and determining the need for guidance at all levels of government to inform and support that decision process is the objective of this thesis.

There are manifest examples of such decisions being made and applied at the government level to the civilian population, but not being described within the

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framework of "Considered Risk Casualties."[1] This is an environment where the government has agreed to destroy occupied, hijacked, civilian airliners and has also made decisions prioritizing distribution of limited supplies of pandemic vaccines, both of which will inexorably result in the loss of life, albeit, with the clear objective of securing other lives. Thus, the "Considered Risk Casualties" concept has been, and is being, visited upon the civilian population, but the social, political, operational, and cultural influences associated with making such decisions appear to have scant or vague references for use in that process. This is also true for its potential extrapolation to wider crisis circumstances that such decision precedence will engender if the repeatedly anticipated terrorist threats to the homeland prove valid. If the catastrophic scale of the "all hazards" issue being discussed is likewise legitimate, then the full range of homeland security structures and entities, from prevention, security, and intelligence, to response, safety, and recovery, will potentially be faced with "Considered Risk Casualties" decisions. These conditions would be well served by a guidance process that can assist in making such decisions. An example of a cause and consequence condition and a consumer of that decision guidance process is described in the following.

The New York City Fire Department (FDNY) has 11,400 firefighters in 511 companies and units responsible for the safety of eight million residents, millions of commuters and tourists, and some of the most valuable infrastructures in the world (Griffiths, 2007, pp. 2, 3). Each of its five elite Rescue Companies is staffed on each shift by six of the most experienced and trained members of the department. On September 11, 2001, these elite units responded to the World Trade Center (Griffiths, 2007, pp. 2,3). Approximately half of all the FDNY resources were committed there, causing a major reduction in the response capabilities for the rest of the city (McKinsey and Company, 2002, p. 9). After the collapse, the elite Rescue Company resources responsible for over eight million people on that day were virtually nil. Every Rescue Company firefighter assigned to duty that morning perished. They died to a man.

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[1] Note: Some interviewees have demonstrated a discomfort with the term "Acceptable Losses," and have universally suggested finding an alternate term, particularly as the thesis will consider this as a condition for the civilian population. Hence, the author's suggested terminology of "Considered Risk Casualties."

Worldwide, it's a hallmark of Al-Qaeda and its followers, to commit multiple, simultaneous attacks aimed at causing high casualties. If future, repeated attacks include weapons of mass destruction (WMD), the necessity for trained emergency services to manage and recover from those events will become critical. There are approximately 1.14 million firefighters (823,950 volunteer) in the US (U.S. Fire Administration, 2008), and 836,787 police officers (U.S. Department of Justice, 2004) to provide protection and response for approximately 300,000,000 Americans. In the war on terror these responders will be some of the most valued personnel in the country and represent a finite national resource.

If one can anticipate additional future attacks, possibly on a larger scale that will again and repeatedly require similar resources, homeland security officials will find themselves having to consider a "Considered Risk Casualties" equation. For government management and entities that now find themselves in civilian circumstances that are threatened in ways that had previously only been known to the military, providing guidance for such decisions, which frequently involve a myriad of factors that must be considered and concluded in moments, could have considerable value.

Similarly, public health officials currently involved in questions of resource allocation concerning personnel, medicines, equipment, and services if faced with anticipated disease epidemics, whether caused through natural occurrence or as a result of terrorism, will be tasked with similar decisions. Whereas Considered Risk Casualty command decisions involving the traditional emergency services will almost always involve dynamics that cannot be fully known at the time the decisions are made, public health does not necessarily function within the same void. Public health officials know the quantity of vaccine available, the number of hospital beds, and the inventory of respiratory devices that can be applied when needed. They also know from historical perspective and clinical analysis what the probable demand for these services will be. The delta between those resources and anticipated need is the realm of Considered Risk Casualties.

Unlike the traditional emergency services, public health therefore enters the decision-making process within generally defined parameters that will knowingly result in casualties, yet, as shall be seen, the metrics that influence and support those decisions are less defined than are the stated solutions.

Homeland security can gain substantial value by obtaining a broad spectrum of theoretical experience and analysis from the humanities and/or social sciences (other disciplines) where there exists the necessary detachment to consider multiple facets of life and death decisions without the urgency of crisis conditions. Just as there is a significant chasm between the other disciplines and homeland security approaches to problems and questions of the same nature, there is also a lack of awareness of the knowledge and needs that both the academic and operational realms have or require. Also lacking is the realization of how each of these entities can benefit from the work environment and objectives of the other in advancing the purposes and professionalism of their individual fields of endeavor. The other discipline practitioner and the emergency worker can mutually benefit by seeking, obtaining, and sharing the knowledge of the other, and it is therefore a valid and worthwhile process to seek such an accommodation to share the knowledge and experiences that each has acquired.

B.   OVERVIEW OF THE RESEARCH

1.   The Problem

On September 11, 2001 the decision was made to shoot down occupied, commercial airliners that had been hijacked. Although events overtook that necessity, with that decision, the passengers on board those civilian airliners became "acceptable losses" within the normal understanding of the term as applied by the military. These individuals would have been expended to save others.

Similarly, public health officials currently find themselves involved in questions of resource allocation concerning personnel, medicines, equipment, and services if faced with anticipated disease epidemics, whether caused naturally or as a result of terrorism. A national distribution plan for the limited supply of pandemic flu vaccines has been

published by the Centers for Disease Control and Prevention. While the intent of the plan, (to maintain the public health structure viability to serve the needs of the larger population) is manifest, this decision inevitably leads to the potential loss of some individuals in order to ensure that the objective of keeping the healthcare structure remains intact.

A conscious decision on the part of government agencies or executives to take actions that expend lives to save lives or to restrict the application of critical, finite resources, also at the expense of life, and in order to husband those resources for the benefit of the wider population over the course of the war on terror or other crisis circumstances, is a condition that will be considered in this paper. In an environment where the government has agreed to destroy hijacked airliners, and decisions prioritizing distribution of pandemic vaccines exist, the "acceptable losses" concept has been visited upon the civilian population, and the decision process by which these conclusions are reached is worthy of review.

It appears from the literature review and research that there is a wealth of awareness of the concept of Considered Risk Casualties, or more specifically, familiarity with the existence of the military tradition of "acceptable losses" in both academia and homeland security. In the environment where the concept is utilized, the use of that term rarely requires explanation, indicating recognition of the meaning contained in the phrase. However, there is a distinct lack of documentation of what elements may combine to define the term, and there is a virtual void of literature in homeland security circles about the thought process or "decision-tree" to apply in determining when such "losses" become "acceptable," or if they are at all. Such literature as does exist is frequently a post-incident analysis of the propriety of a situational outcome in comparison to the original intention.

Conversely, the literature of the other disciplines has abundant discourse with a nexus to this concept. The concept of "acceptable losses" while most frequently resident in military issues is, and has been, considered in all the above disciplines at various levels, with different intents and outcomes over time. An objective of this research was to gain insight into how each of the chosen disciplines views the topic, the circumstances

and standards under which acceptability is achieved, and the environments within which acceptability can be applied. They have examined the various dynamics and conditions that either conflict or aggregate to make the "losses" "acceptable" from multiple points of view. There is material on the comparative value of lives, i.e., the authority to exchange one life for another, with contributing elements that should comprise the decision sequence leading to such outcomes. These traditionally abstracted discussions within the humanities pivot around invented scenarios that are contrived to facilitate discussion of the issues the author intends to discuss. Compounding factors are added at will to the scenarios to make the issue either more granular or more expansive in order to serve the intended limits of the discussion.

Evidence was collected from various, diverse disciplines such as, emergency services, theologians, philosophers, ethicists, bio-ethicists, the military etc. as regards their considerations and observations in Considered Risk Casualty situations. The purpose of this collection was to gain insight into how these various disciplines historically, and currently view the circumstances they believe to be pertinent in consideration of Considered Risk Casualty permissibility, use, and acceptance, if in fact such is the case at all. Selected evidence from each discipline indicated a common, initial, discomfort with the concept of Considered Risk Casualties, and each of them sought to define its elements and boundaries. Starting from that view, each of the disciplines eventually arrives at recognition that Considered Risk Casualties has a modicum of acceptability. However, as could be expected, they reach their conclusions through using a range of criteria that are germane to the core purposes, principles, and motivations of their individual disciplines. In order to appreciate their distinct observations appropriately, it was necessary to discern the separate belief systems or criteria each discipline used in order to identify the points of agreement or differences between and among their views on the topic. It should be noted that the research never intended to evaluate the "right or wrong" of their observations, but only to locate their commonalities.

Through focusing this aspect of the research on a spectrum of professionally and intellectually accepted criteria, a pattern became discernable which collectively indicated a potential for the existence of acceptance, application, and performance considerations in Considered Risk Casualty environments.

It also became apparent that an obvious void exists between the wealth of other disciplines' observations on the topic of Considered Risk Casualty and the operational realm of the homeland security decision maker and operative. The other disciplines' discussions center around artificial and contrived scenarios intentionally designed to foster an intellectual discussion in an academic atmosphere. The homeland security practitioners revealed no knowledge of another discipline's discussions and relied on experiences within their own disciplines when making judgments about Considered Risk Casualty incidents. This void in and of itself appears to be an original research discovery, and homeland security managers could be benefited by making it known to them that a wealth of commentary is available in the other disciplines about this topic. This knowledge could prove invaluable in times of crisis decision making when the saving of lives is part of the considerations.

Conversely, making the conditions and realities of the homeland security environment known to the other disciplines can also serve to advance the discourse in those disciplines and serve as an opportunity for original applications of their observations. Moving the researcher's excellent, cogent observations from the abstract to the pressures created by crisis situations of reality could stimulate new vistas for them to explore that have not previously been considered, albeit with a loss of the luxury of detachment. Also, creating a bridge for the interchange of theoretical ideas with the operational needs and experiences of homeland security practitioners can serve to create additional, original work among those who inhabit both sides of that bridge. The research with the greatest utility that may come from this present discussion is the codifying of select common factors that move throughout the other disciplines that can be considered and reviewed in making decisions in a Considered Risk Casualty situation. Identifying a range of factors that could contribute to the decision making considerations that form the basis for those decisions in crisis conditions may serve homeland security, the other

disciplines, and the civilian population as a whole. Determining the need for educational programs to assist in that decision process evolved as a possible objective of this research and thesis.

If establishing a case for the creation of educational programs that serve to guide decision makers involved in Considered Risk Casualties is another desired outcome, then the analysis of the above disciplines' observations and needs should inform the content of such programs.

2.   The Boundaries of the Study

While it has been clear from the onset that there is a common awareness and history of use of the concept of acceptability of loss of life since antiquity, there is less literature about considerations prior to use of the concept as compared to the voluminous documentation on its subsequent effects. A majority of examples of awareness about the concept are within the context of warfare where the outcomes are viewed with a demeanor that might be described as a tolerance for the undesirable. Other examples wherein the knowing expenditure of life is equated to gaining a valued objective or in comparison to the securing of other life generates responses depending on incident motivation that range from consummate abhorrence to sympathetic understanding, which reflects the moral and philosophical basis of those other examples. Such a scale of responses provides a fertile ground for commentary by all disciplines with an intellectual nexus to such review. That commentary, however, largely addresses outcomes and influences rather than the deliberative process of decision making in a crisis incident involving Considered Risk Casualties. It is within that relatively narrow confine that this study is bounded, inasmuch as that is where an educational program that could come from this study would focus.

The study crosses discipline lines to find various observations or to interview representatives acquainted with the historic and current positions on the concept, as well as those who have been practitioners of it. The thrust of the context is within the current threat environment as regards the civilian population, and the application of Considered Risk Casualties as opposed to the more traditional military references. However the

military experience remains within the study boundaries to utilize its knowledge of cause and effect relationships that are deemed invaluable in measuring the scale of the need for decision-making guidance. The same consideration applies to both the public health and emergency management and services domains in the civilian realm. Elected and government officials are also within the confines of the study due to crisis decision development frequently being within their purview.

3.   The Research Strategy

This study was conducted in a manner and with the purpose of collecting information and literature to demonstrate an author's capacity to provide comments about the concept of Considered Risk Casualties. The same purpose was applied in the choice of knowledgeable and experienced interviewees. Opinions on the Considered Risk Casualty concept are legion, and as can be reasonably expected, contain an element of emotion reflective of a condition that has so frequently surfaced in human history. The research effort recognized this dynamic and attempted to preclude any undue influence through a process of careful selection of materials and personnel that focused on the substantive issue: decision making. This however does not imply that the process was exclusionary. Opportunities for additional input, whether literary, documentary, or with individuals that surfaced during the research process, were pursued as they emerged and had a clear relationship to matters that address decision-making guidance. It was also anticipated that additional information would be forthcoming from those who have applied the Considered Risk Casualty concept, and know its outcomes and consequences as a balance to purely theoretical perceptions of decision validity.

As may be surmised from the range of pertinent disciplines in this topic, there are multiple facets directly associated with the concept and practice of Considered Risk Casualties. These dynamics lent themselves to a cognitive sequence of questions that were individually rigorous, yet naturally interdependent. They also formed both milestones that needed to be addressed in selecting the subsequent questions, or deciding whether they were germane at all. For example, if there was a discipline or belief system that denied Considered Risk Casualties can ever have a utility, then further questions

concerning formatting guidance for its use would have been pointless. Conversely, if one discipline defined a condition that countered the position of another discipline, then questions adjudicating that diversity became applicable.

Broadly, the initial series of questions investigated the status of the concept of Considered Risk Casualty within a discipline. That logically flowed to a series of questions concerning the issues used within the discipline to judge the level of acceptance or denial of the concept. Next, the inquiry examined the range of circumstances that pertained to the application and utilization of the concept. That was followed by a review of a loss/gain analysis consideration that influenced the decision-making process in Considered Risk Casualty determinations. These specifically in some instances, and through inference in others, collectively demonstrated the level of need for decision-making guidance in this arena. It was recognized that such a line of questioning could either define or deny the need for such a program. Regardless, the outcome was instructive in either instance.

The reader of this thesis will note that references for this paper appear to cite a limited number of sources. For example, in theology, only principles of Christian belief are addressed; in philosophy, one major philosopher is most frequently cited. This is not an oversight. During the course of the research, it became apparent that these and other disciplines advance their horizons through endless debate and discussion of the issues at hand, frequently identifying specific nuances to evaluate the observations of a colleague. In short, the methodology used to progress in these disciplines is that of continuous argument. The objective of this thesis is not to take sides in that debate, it is not to judge the value of an identified nuance, nor is it to determine the "right or wrong" of a particular individuals observations. By including multiple views and/or their ongoing discussion points, the thesis inevitably turned to being about religion, theology, or ethics rather than being about decision making in Considered Risk Casualty situations. This thesis strives to point out to the reader that there are disciplines outside homeland security that have comments and information that can be relevant to an individual facing the most difficult of decisions, that of life and death. An objective has been to identify the fact that such sources of information exists at all in other disciplines, and that they have a

nexus to contemporary crisis management issues; it is not to participate in another discipline's internal debate. Hence, including a wide range of debated nuances from those disciplines did not serve this thesis as much as noting the pertinence of the observations of a limited but representative sample of credible individuals that revealed the existence of that information. Conversely, in this thesis, the humanitarian, the social scientist and theologian will find that practical and actual examples exist within homeland security that can bring a measure of reality and application to their abstract observations, beyond that which is currently their normal arena for discussion. The reader is encouraged to explore the wider observations that are available in the cited disciplines, and any other disciplines, that may additionally support or limit the abilities of the homeland security decision maker. It is anticipated that there are significant opportunities for additional research in this venue.

4.   Information Types and Collection Methods

In this instance, an analysis of what may be applicable to Considered Risk Casualties will, of necessity, be subjective inasmuch as there is no known "program" with a Considered Risk Casualty guidance policy in existence. That is not to say that a compilation of the understood theoretical principles, the objectives sought, the condition of the decision environment, and actual outcomes versus anticipated ones cannot be accomplished. In the absence of programs that can be drawn upon, any decision-making processes that involved any or all of the above considerations can serve to inform the researcher and also provide representative situations to identify the applicability of their use. In the additional absence of any documentation of a "decision tree" process contained in reviewed Considered Risk Casualty events, an emphasis must be placed on collecting the observations and recollections of the participants and/or historic accounts of actual events that made success achievable, or failure inevitable.

While standards of success or failure, or right or wrong, and what constitutes either in this venue, would be represented by arbitrary definitions, those types of conclusions were specifically not being sought in this research. Yet, inductive reasoning that revealed the common points of knowledge in the social sciences and/or the

humanities, and how they could relate to the decision-making process and the needs of that process in homeland security revealed a distinct relationship between these areas.

C.   THE CHAPTERS

This thesis is composed of eight chapters. Chapter I (Introduction) identifies the incident that provided the inspiration for this paper; examples of current Considered Risk Casualty conditions stemming from governmental actions; and explanations of how the study was organized and progressed.

Chapter II (Bioethics) builds on the Considered Risk Casualty example of the Pandemic Vaccine Distribution Plan mentioned in Chapter I. The chapter reviews factors of public understanding of the acceptability of death in the civilian context, the government recognition of the shortage of sufficient vaccine for such events as pandemic flu; the governmental distribution plan solution for the shortage; the stated plan objectives of ensuring the continuity of public health services during an epidemic; and alternate options to the plan and it's consequences. It then turns to the Canadian public

health experiences during the SARS epidemic and the lack of information about decision making over what Considered Risk Casualty issues were evaluated in arriving at the proposed distribution plan.

Chapter III (Theology) presents a view of the moral and abstract issues that have been discussed for centuries about the conditions under which death of oneself or others is acceptable. This chapter describes a moral principle on which acceptance is understood; the distinction between "killing" and "letting die;" operational decisions involving death; what the limits of the requirements of duty are; and the factor of proportionality in risk situations.

Chapter IV (The Military) considers the military concept of "acceptable losses" and its criteria; the development of the Geneva Conventions pertinent to losses; evaluating proportionality in military and homeland security actions involving losses; characteristics of decision makers in acceptable loss conditions; and preparing military decision makers for these situations.

Chapter V (Philosophy) presents a wide array of issues and considerations that relate to some of the factors that can exist in Considered Risk Casualty decisions. The matters addressed here describe multiple dynamics that the decision maker can be faced with such as: the rationing of scarce resources, the duty to rescue, the difference between "killing" and "letting die," when it's permissible to harm some to save others, and when giving aid is or is not required. Each of these points is also reviewed as being homeland security issues.

Chapter VI (Considered Risk Casualty Incidents) studies a series of three actual emergency incidents involving the loss or potential loss of life and the Considered Risk Casualty decisions arrived at by the homeland security practitioners who made those decisions. The conditions they were operating under are compared to the issues previously discussed, and each philosophical, theological, etc. factor is reviewed for their relevance in terms of the actual decisions that were made.

Chapter VII (Decision Making) analyzes the process of decision making under conditions of threat and risk. It compares the issues facing the decision makers in the previous chapter's incidents, the importance of experience in decision making, and the military views on developing experience and preparing individuals for such decisions.

Chapter VIII (Conclusions) discusses why it is important that homeland security decision makers be familiar with the above body of knowledge, and explains how the information contained in the humanities and social sciences can assist them. This chapter also recommends that educational programs be developed that draw upon the knowledge and experience of both these disciplines and homeland security practitioners to the mutual benefit of both, and suggests further areas of research.

Chapter IX (Suggestions for Further Research) reviews the areas within the fields of the social sciences, humanities, decision making, and education that were found to have a nexus to Considered Risk Casualty decisions but which were not explored in depth during the development of this thesis. The topic can be so encompassing that viable avenues of research exist in each of these areas that, if fully developed, can serve to inform and further explain a myriad of factors that were significant matters in the current findings.

II.   BIOETHICS

A.   DEATH AND ACCEPTANCE

The term "acceptable losses" generally conjures up an association with military matters. The understanding of the term has been one that creates a corollary between the importance of an objective in warfare and the amount of death and destruction that will result in the achieving of that objective. It is in effect a cost/benefit ratio analysis. The thought that an equation that expends lives for a described objective or purpose is, in this society, tolerated to varying degrees when speaking of military matters and warfare, but the application of such a concept to the lives of the civilian population appears to be an anathema to that population. (Kay, 2004)

The country has always been aware that a varying number of deaths could occur, or do occur, from an array of threats and hazards through continuously being advised about the statistical annual death rate from such things as motor vehicle accidents, lightning strikes, house fires, cancer, accidents in the home, etc. For many years Americans have also been advised that a nuclear attack on this country would result in an estimated number of casualties and death. In short, Americans know that millions of people die each year due to multiple causes, and public health agencies are pivotal in bringing such statistics and warnings to the attention of all. (Statistics, 2008)

However, knowing about those deaths, and accepting them are significantly different matters. For example, while there is a common understanding that death can occur from riding in an automobile, that knowledge is mitigated by the concurrent understanding that certain measures are also applied by car manufacturers and the government to reduce that possibility and the number of deaths in vehicle accidents. There would be significantly less understanding for any concept that would suggest there are a certain number of deaths that are "acceptable" for the objective of having the continued convenience of using automobiles. Certainly, there is no appreciation for a concept that would knowingly permit a loss of life to occur for that same objective. Yet, people do understand that concept of expending lives for an objective as a factor in war.

(Kay, 2004) Thus, there is a dichotomy between the civilian and military circumstances within the population surrounding the military concept of "acceptable losses" and its companion concept in the civilian realm of "Considered Risk Casualties." The concept is recognized for military matters, but there is no concomitant understanding for the civilian version; or is there?

B.   THE VACCINE SHORTAGE

On the national level, the Centers for Disease Control and Prevention (CDC) as well as state and local health departments annually provide the population with advice and warnings concerning the need for vaccinations. In the past few years this issue has received substantially greater focus, and therefore public attention, due to the concern for epidemic diseases such as SARS, avian flu, and pandemic influenza. Of particular note has been the concern over an inability to produce and/or a lack of effective vaccines for these diseases, and where such vaccines do exist, their insufficient quantities has led to rationing and official plans for restricted distribution.

Within the public health arena one finds multiple plans that pertain to the intentional distribution of limited supplies of vaccines to prioritized groups of individuals in the event of naturally occurring epidemics or terrorist induced afflictions. Almost invariably, that hierarchy of individuals to receive vaccines, consists first of members of the medical profession and emergency workers, and then moves through a sequence of diminishing priorities to conclude with the general population.

Testimony of Janet Heinrich, Director of Health Care, Public Health Issues of the Centers for Disease Control and Prevention, is indicative of the tone throughout a significant portion of the public health literature concerning the CDC plan. The common theme within this literature is to define the problem (a shortage of vaccine resources), (Heinrich, 2004) and then to move directly to the solution of distributing the available resources according to the above hierarchy of prioritized individuals and groups. While the logic of the process to ensure that the public health structure remains viable is manifest, the fact of the matter remains that comparative value is being assigned to lives, i.e., those who receive vaccines and those who must wait. Indeed, the CDC's own reports

included such headings as, "Priority Groups for Influenza Vaccination, Other Vaccination Recommendations, Vaccination of Persons in Non-priority Groups, and Persons Who Should Not Receive Influenza Vaccine." (Centers for Disease Control, 2004, pp. 1, 3) This inevitably leads to the potential expenditure of some individuals to ensure the objective of keeping others alive, which is the concept of Considered Risk Casualties being applied to the civilian population in order to achieve an objective or greater good. Both the testimony and the various plans' authors are silent on critical analysis of the decision sequence or any discussion of that sequence at all as regards Considered Risk Casualties, and appear to accept the conclusion as a valid given.

There are nuances within the public health response plans literature about the construct of the priority recipient listings, but scant issue about the propriety of the existence of such a list at all. This is not to suggest that there is a lack of justification, validity, or legitimacy to the distribution plan, but just that there is a noticeable gap between the statement of the problem, (a lack of vaccine), and the solution, (the distribution plan). Information is not available about the decision process that took place between the recognizing of the problem and the acceptance of a solution.

A former official at the Office of Planning and Emergency Response Coordination of the United States Department of Health and Human Services (HHS) has confirmed that the policy level discussions on vaccine distribution included the Centers for Disease Control and Prevention and the first responder and medical communities. The focus of the discussions was to keep the American way of life, government, medical, and emergency management functioning by caring for those providers first. The official confidentially noted that the "acceptable losses" aspect of this issue were thoroughly discussed in developing the solution, but were not codified as part of the process. That official noted that any attempt to enhance the decision-making process in a Considered Risk Casualties situation is an area that would require extensive levels of discussion for policy managers, and that any such change in the cultures of the various government response agencies would require extraordinary training factors. (Confidential personal communication with author, 31 October 2007) This was not an objection to that need, but merely recognition of its importance, necessity, and requirements.

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At the government policy level in public health, the public avoidance of the issue of Considered Risk Casualties is evident. As noted in the literature of the Government Accounting Office (GAO), *"There is no mechanism currently in place to establish priorities and distribute flu vaccine first to high-risk individuals."* (Government Accounting Office, 2001) This statement is indicative of the thought pattern and approach in the announcements and publications of the public health officials (i.e., it assumes the propriety of a process that establishes a primacy of distribution), but only laments the lack of a procedure, or defined decision process in determining the priority. In short, there is no critical questioning whether establishing a hierarchy of life and the inherent Considered Risk Casualties contained in that decision is appropriate at all. It may well be appropriate, but the information to judge that issue is unavailable as part of that decision.

C.   ENSURING CARE

As noted, the literature and the testimony about the plan fails to address the fact that some people will most likely die because of a decision which gives relative value to lives but ensures that the necessary vaccine distribution and delivery process is viable. As confirmed by the above Health and Human Services official, the obvious intent is to keep the public health structure and personnel functioning in order to continue a supply of personnel and medications to be of service to the population during a health emergency. In short, it could be said that the objective is to ensure a type of "supply chain" of professional responders and medications. The strength of that objective is noted in the literature by including the fact that the vaccine priority recipient status extends to those who support the above public health personnel, such that those workers will be free of ancillary concerns, in order to permit them to focus on their duty to care. (U.S. Department of Health and Human Services, (HSS) n.d.)

Thus, the literature reveals that in the absence of codified information about the decision process, there appears to be a singular propensity within the public health community to accept this issue primarily as a supply and distribution matter, rather than

to address the potential it creates itself for loss of life. Again, this is not to say the recommended solution is in error, but it does say, as noted above, that there is no information about the decision process.

The CDC itself, in making recommendations on vaccination, may have revealed an awareness and concern about this and the consequences of prioritizing individuals when in the establishment of "Priority Groups for Influenza Vaccination" chose to state, "The following priority groups for vaccination with inactivated influenza vaccine this season are considered to be of equal importance..." (Centers for Disease Control (CDC), 2004, p. 1) In effect, they continued to denote a ranking system, but within the system they chose instead to designate categories of individuals in a certain rank to be all equal. It is not possible to tell from the document the motivation for this subtle change, but it is significant by its uniqueness within the collected literature. By limiting the number of hierarchies within the group, the document came close to discussing the recognition of those who die, but the CDC paper failed to be analytical of the decision process itself or the outcomes directly. In essence, the critical analysis of the authors failed to be critical. There exist alternatives to the classifications of priority individuals, but it is to merely substitute other forms of criteria for selection to the hierarchy.

Interestingly, the CDC has published a report that noted the contributions to this discussion made by the Advisory Committee on Immunization Practices (ACIP) and the National Vaccine Advisory Committee (NVAC), which was provided to HHS. This report endorsed the hierarchy distribution plan and also provided a "rationale" for each of the tiers in the "Vaccine Priority Group Recommendations." While there was no direct discussion of the Considered Risk Casualties within the rationales provided for each of the priority groups, the stated reasons for a particular groups' inclusion in the priority list is identified. In this "rationale" (HSS, n.d.); however, one finds some valuable insight into the types of considerations that must be included in the decision-making process in a crisis, but without specifically addressing the life and death outcomes inherent in these prioritized plans. Thus one sees that the CDC distribution plan reflected its mandate of identifying and containing the spread of disease, whereas this HHS plan is reflective of an ACIP and NVAC view that also includes managing the repercussions of the disease in

a broader societal spectrum. Even so, there still remains an absence of discussion about the Considered Risk Casualties factor that stems from these plans.

D.   CANADIAN EXPERIENCES

It is odd that such an absence of information exists in public health announcements. Among those governmental structures which in the event of a crisis would be part of the homeland security response agencies, public health is the one element wherein there exists significant material to inform the decision maker.   This material is reflective of the fact that public health could be considered as a subset within the context of the overall medical profession which is steeped in questions of ethics. There are a number of examples to demonstrate this material.

Severe Acute Respiratory Syndrome (SARS) came to the world's attention in the fall and winter of 2002-2003, and in the western hemisphere it was most prominent in Toronto, Ontario, Canada.   Health-care workers were among the number of people worldwide who contracted the disease and became sick or died. Following the outbreak, the University of Toronto published an analysis of the ethical considerations and the lessons learned during the outbreak. The report noted that:

> Government and healthcare leaders need to make the values behind their decisions public. They should discuss the values with people who could be effected, ranging from health care workers, who will find themselves on the front lines, to government officials, who are making decisions about the allocation of limited resources, to the public at large because people will be in many ways.(*sic*) [effected] (R. E. G. Upshur, 2005)

A subsequent analysis of the report revealed ten key ethical values: "Individual Liberty, Protection of the Public from Harm, Proportionality, Reciprocity, Transparency, Privacy, Protection of Communities from undue stigmatization, Duty to Provide Care, Equity, and Solidarity." (Green, p. 2) It also noted:

> There are times when the interests of protecting public health overrides some individual rights, such as freedom of movement…While health care professionals have a duty to care for the sick, this must be tempered by a duty to care for themselves in order to remain well enough to be able to carry out their duties... it is necessary for such hard decisions to be made in a fair manner, including appropriate access to limited resources. (Green, pp. 8, 9)

Clearly, these reports serve to both support and endorse the ethical basis for and the propriety of the CDC vaccine distribution plan. Equally importantly, it provides a series of criteria health officials can use to support their decision making, yet there are other cautions to be considered. Thus, as can be seen in the Toronto report and the above ACIP/NVAC report, there is an inclusion of factors that can inform decision making, but still, no discussion of Considered Risk Casualties.

The CDC itself, in a report from the International Conference on Emerging Infectious Diseases, noted in a discussion of mathematical models that "...models can provide a means to systematically compare alternative intervention strategies, determine the most important issues in decision making, and identify critical gaps in current knowledge." (McKenzie, 2004) However, they did warn that in decision making:

> ...if only policy experts are engaged, they may concentrate on information that fits their opinions and interests. The modeling most likely to help with bioterrorism preparedness and response will emerge from scientific, operational, and policy professionals who listen to and engage each other, with real respect and candor, on a continuing basis. (McKenzie, 2004)

The Hastings Center, a Bioethics research center, was quite succinct on establishing a hierarchy of distribution:

> ...but in a pandemic, rationing is inevitable because there will not be sufficient resources to go around. And rationing, provided it is done in an ethical manner, will serve justice and save lives by conscientiously distributing scarce lifesaving resources in harmony with our nation's deepest values, including fairness. (Hastings Center, n.d.)

In this there is evidence that the Considered Risk Casualties issue is recognized by disciplines ancillary to and associated with public health that serves to approach, if not occupy, the void left by the prioritized distribution plans on this all important issue.

Lest the reader begin to presume that the criteria being applied in this situation that may lead to the deaths of some is universally accepted, Baumgarten and Insco, of the University of Michigan, noted in their discussion of various schools of philosophic thought about the relative value of lives, "You are not favoring each of the people whose lives can be saved; it's just that there are more of those people, [who could be saved] so

considering each person equally results in 'trading off' one life in order to save fifty."
(Baumgarten and Insco, 2001, p. 12) Again, this reflects the need to step outside the distinct public health venue to locate discussions of the life and death consequences of plan making decisions.

Decisions that have such outcomes will always have a wide range of considerations and complex influences that must be evaluated, and multiple disciplines have routinely added their voice to the discourse such as the above philosophic point. For example, Benjamin's analysis, from the Department of Health and Mental Hygiene in Baltimore, introduced another tactic to the discussion by not addressing the influenza vaccination plan at all, but provided a discussion of the similar smallpox vaccine policy. By presenting the possibility that the vaccination process might fail in its objectives, he forces the consideration of alternate decisions. (Benjamin, 2002) While it is difficult to know if the influenza/smallpox diseases corollary is legitimate, he specifically rejected prioritization in favor of mass inoculation to save all lives, thereby highlighting the life value judgment through eliminating it in favor of inoculating everyone. Such a tactic forces the influenza decision makers to consider the possibility of failure of their plan and return to the life value issue rather than that of the survival of the health care system structure. However, this suggestion would require that a supply of vaccine sufficient to inoculate everyone is available.

Emanuel and Wertheimer, from the George Mason University School of Law, suggested substituting a vaccine distribution pattern different from that of the CDC to one that is more in line with their preference (Emanuel and Wertheimer, 2007) of who should be vaccinated, and they, in effect, initiated an endless discussion about the credibility of the CDC decision, since anyone would be free to make a personal preference based observation about who should receive the vaccine first.

Continuing outside the specific realm of public health but within the related discipline of bioethics, one finds a full spectrum of views about the loss of life and the factors involved in the issue. The ethical pattern of directly addressing the loss of life inherent in these public health decisions continues with other authors, in a wide-ranging analysis of multiple factors in both planning and response. Whereas public health avoided

advising the public about the losses aspect of their prioritization decision, it recommended the full participation of the public in each stage of the decision-making process. The authors' method of moving the discussion through a series of traditional ethical contexts and philosophical principles and theories to judge the public health outcome was most beneficial in identifying the factors involved in each element of the decision process. (Lemon, Hamburg, Sparling, Choffnes, and Mack, 2007)

What is seen in all the above is that there are many approaches and discussions about the "process" of any distribution plan, but scant discussion about the 'who lives and who dies' consequences inherent in any of the plans.

E.   ISSUES

The value in these views, for the purposes of this thesis, may not be in their conclusions as much as serving to surface the myriad of considerations that must inform any decision involving life values. It appears that the combining of all the above pivotal observations and commentary provides insight into the complexity of decision making and the range of existing thoughts on the topic that are available to those who must make these life consequence decisions.

Thus one can see that decisions have been made, and presumably, continue to be made, by government public health entities that can result in the expenditure of lives in order to protect the lives of others in the wider population. It is evident therefore that the answer to the original question of whether there is an understanding of the concept of Considered Risk Casualties among the civilian population is clearly yes, there is. However, the conditions under which it is tolerable and the level of that tolerance depends on the type of setting (military "acceptable losses" or civilian "Considered Risk Casualties") as well as the conditions and influences present at the time the decisions are made. Hindsight is free to judge the outcomes and consequences of these decisions, which can be unknowable at the time they are rendered, but it is that very uncertainty that makes these decisions tortured moments. Hindsight observations are informative but not as valuable to the decision maker as would be prior knowledge of these insights. Multiple disciplines have spent centuries suggesting and analyzing the endless variety of

factors that can influence these decisions, and in that process have produced a rich body of knowledge and experience that can inform decision making in life and death situations today.

This process of informed decision making would benefit by expanding it and giving it a structure that could assist those who may be suddenly faced with future decisions of similar proportions. Such decisions were, are, and will be exactly that: "decisions" that have been derived at the conclusion of a presumably deliberative process. Both the problem and the outcome are recognized, but what remains wanting is an advisory process that gives guidance to current and future decision makers who will be required to address similar and catastrophic issues under crisis conditions that deny them the time to be deliberative.

III.   THEOLOGY

A theologian has described the following situation: A firefighter enters a building where there is a child trapped. Eventually that firefighter jumps from a window to save herself but without the child that could have been saved. Does that firefighter bear a moral responsibility for not having saved that child? There may be operational, procedural, philosophical, and legal issues involved in this situation, but for the moral aspects, one can also examine the view of theology.

While there are multiple religions and forms of theology, this thesis will not examine the range of them that are available to address the above question. The author has chosen not to introduce other theological views because this thesis is not about theologies or the areas of debate or agreement that may exist between them. This chapter is concerned with demonstrating that the discipline of theology per se, has considered questions and answers that can be pertinent to the types of situations described above. Rather than join in a theological debate that must naturally ensue from an introduction of multiple forms of theology, for this thesis the author has chosen Christian theology as the representative form of the discipline to demonstrate the pertinence of thought present. It is reasonable for the reader to extrapolate that additional theologies would also contain observations on the topics contained in this thesis. As in other chapters, the author is not intent on surfacing opposing, or in some cases even supporting the views, contained in a discipline, since that would shift the locus of attention to matters that would be internal to a particular discipline, rather than merely demonstrating that there is useful content for homeland security within the discipline as a whole.

One can examine the morality of the above contemporary firefighter scenario by starting with a Christian theological principle originating in the Middle Ages and continuing into today.

A.   THE PRINCIPLE OF DOUBLE EFFECT

The theological views on the concept described as "Considered Risk Casualties" have their basis in antiquity. In Christian context, it is based on the wider teachings of St. Augustine on "just wars" from 1500 years ago. (J. O'Connor, personal communicaion 6 December, 2007)[2] The particular issue in question is contained in the "Principle of Double Effect" postulated from the thoughts of St. Thomas Aquinas in the middle of the Thirteenth Century (Solomon, 2001) At its core, the principle generally states that "…in cases where a contemplated action has both good effects and bad effects, the action is permissible only if it is not wrong in itself, and if it does not require that one directly intended the evil result." (Solomon, 2001)

Moral theology defined numerous influences that affect the application of this principle, and philosophers and ethicists have likewise debated and written on its intricacies:

> Generally speaking [there are] four criteria for the use and application of the Principle of Double Effect, and it starts out with the idea that your initial action has to be itself a good action or what they call a 'morally indifferent' action, and that action is seen as having two effects, [hence] the name of Double Effect Principle. The second criterion after you have the performance of this morally indifferent or good act, [is that] it has to be that your intention is also to achieve the good end and not what is called the bad end or the evil, so the intended effect is called the direct effect and what happens in terms of the evil effect is only permitted or tolerated but not intended. The third criterion is that the evil effect cannot be the result of a good effect. So in other words, the good and the bad have to arrive simultaneously as a result of the first action that you take and then the last criterion is that there has to be a proportion agreed for initiating that good or indifferent act in the first place. (V. Genovesi, personal communication, 9 July, 2008)[3]

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[2] The Right Reverend Monsignor James O'Connor, Doctor of Sacred Theology, studied at the Vatican, and was for many years on the faculty of St. Joseph's Seminary, Dunwoodie, New York.

[3] Reverend Vincent Genovesi, S. J., holds Master's Degrees in Philosophy and Theology, and a Doctorate in Theology from Emory University. He has taught Christian and Political Ethics at St. Joseph's University in Philadelphia for thirty-five years.

An additional theologian's view was that of "... the principle is that in the service of a greater good, one may tolerate a lesser evil that may come about in the course of pursuing the greater good." (D. Ruff, personal communication, 13 June, 2008)[4]

From these three views of the principal it is clear that there is an agreed consensus at the core of the theory, but it is also obvious that the application of this principle could have a significant number of nuances and considerations, particularly in matters concerning life-and-death decisions. The primary element in matters of Double Effect is one of intent. Another theologian, Grisez, reviewed that issue in detail by asking the question "Is it always gravely wrong to intend to kill the innocent?" (Grisez, 1993, p. 469); and he made multiple points in describing the answer to that question and other issues.

> To resolve these issues, it is necessary first to understand what **intend** and **innocent** mean. Then one must see why it is always wrong to intend to kill the innocent, why this matter does not admit parvity, and how subjective factors can reduce the guilt of an act of killing. (Grisez, 1993, p. 469)

As initially defined, the Principle of Double Effect described the issues of intent and that of "the innocent," which Grisez described as follows:

> In the present context, though, innocent is used in a technical sense to refer to everyone but those who either have been found guilty of a capital crime or are carrying on an unjust war...

> It is clear from the preceding fact, in the Christian tradition on the morality of killing; the original core of the idea of innocence is immunity from capital punishment, not moral innocence...

> The preceding points clarify both the precise meaning of intending to kill and the very inclusive reference of the word *innocent*. (Grisez, 1993, pp. 474, 475)

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[4] The Reverend Daniel Ruff, S. J., has a Ph.D. in Religious Studies has been teaching for approximately twenty years. He has been a seminary professor, and for the last eight years has been on the faculty of Loyola College in Maryland.

With this explanation the definition of "innocent" is simply and directly presented and understood. However, the dynamic of "intent" is a more complex issue requiring further examples and clarity particularly in regard to the act of "killing."

1.   Homeland Security and "Intent"

Just as will be seen in the analysis of the philosopher's views, it is also true here that there is no suggestion being made that homeland security personnel are ever involved in the act of "killing" as a generally understood act with malicious intent. However, since the probability that many types of death can occur as a result of decisions made in homeland security circumstances (and "killing" remains a description of a distinct type of death) that frame of reference is worthy of being reviewed in the theological realm in order to assist the homeland security decision maker.

"Intend to kill" is the pivotal phrase in the above quote from Grisez, and St. Thomas appears to encompass this entire question of the relationship between intent and "killing" by noting: "Moral acts receive their species according to that which is intended." (Grisez, 1993, p. 469)

Grisez, considered by many to be conservative in his theological views, further endorsed the above comment he cited from St. Thomas by then agreeing with him (St. Thomas) through noting the association between intention and decision making:

> Intentions intrinsically constitute moral acts inasmuch as these acts are the carrying out of choices; but the acts constituted by intentions are either good or evil by their conformity or lack of conformity to right reason, that is, to practical reason, unfettered by non-rational factors, bringing to bear the truth about what is humanly good. (Grisez, 1993, p. 469)

Thus one can see the complexities of Double Effect starting to develop in that intent, as one of its main elements, is itself also dependent upon "right reason" and practicality. That is to say, with actual decisions in the real world. In theology, it is recognized that there are also different types of intent as identified previously by Grisez's comment that "intentions are either good or evil." He defined intent further:

Intend sometimes refers exclusively to the will of an end, as distinct from the choice of the means, but sometimes it refers both to the willing of an end and the choice of the means, as distinct from accepting unforeseen side effects. Here, *intend* is used in the latter, more inclusive sense. (Grisez, 1993, p. 470

2.   Decision Making: Dying Verses Killing

In the above, Grisez indicated that there can be an intention to die that has good intent (entering heaven) but without any intention whatsoever of killing to cause that to happen. It is also true; however, that one can cause something to happen without intending it:

> ...one also causes something nonintentionally [sic] when, in doing something else, one foresees and permits it as a side effect, which one does not cause properly and directly...

> One chooses as a means something in one's power - some performance or omission - thought more or less likely to bring about the intended end. But it also is more or less clearly foreseen that, either possibly or surely, the performance or omission will have various good or bad consequences distinct from its intended end, and in making the choice these good or bad consequences are accepted, gladly or reluctantly as the case may be, as side effects." (Grisez, 1993, p. 471)

Here, the influences that can apply to Double Effect continue to expand. They include a wider range of factors that enter the decision-making process. Indeed, what one sees is that decision process being described as a known "choice." One also sees that the ability and authority to act, or to not act, has a direct nexus to the production of "side effects." The principal issue added to the original one of "intent" becomes that of choice which is described as:

> ...choice is the adoption of a proposal. A person deliberates about doing something considered possible and interesting.... Adopting a proposal to do something is making a choice.... The doing (whether performance or omission) carries out the choice.... Carrying out the proposal has foreseen consequences neither included in the proposal nor sought for their own sake: these are the side effects that an individual or a group accepts." (Grisez, 1993, pp. 471, 472)

It is also interesting to note that this theologian believes that matters of intent need not be positive actions, but in fact, can be omissions or simply the act of doing nothing; but even at that, the intent is the pivotal point in deciding whether or not such an act is a killing. "Someone can intentionally kill another by an omission. If a person can do something necessary to sustain life, but deliberately omits to do it in order that death will ensue, that omission morally speaking, is a means of intentional killing." (Grisez, 1993, p. 474)

One is hard pressed to imagine any circumstance wherein a homeland security official's non-action would be described as a case of "deliberately omits to do it in order that death will ensue." Such an event would require "deliberate" multiple steps starting with intending that someone die and then forestalling preventive measures in order to ensure that the death occurs. However, during crisis, and certainly in its aftermath, a homeland security decision maker may have a personal concern that their actions, or even inactions, could result in deaths that might expose them to the moral accusation of killing. Whereas such individuals would normally conceive of killing as requiring some overt act and presumably therefore would be made uncomfortable by the possibility that even failing to act could result in the same moral consequence, this one statement above, could serve to insulate them from any such concern.

3. Operational Decisions and Death

Having previously examined the difference between "killing" and "letting die," it becomes evident that in the homeland security environment (i.e., all those branches and capabilities of each level of government that apply to the protection and response to threats to the country, it's infrastructure, and population) relative to the emergency services, there is a substantial chasm that exists between the types of death that can and do occur in that environment and the act of killing. Those previous observations, when combined with the above theological views, establish an understanding that all but precludes killing as a recognizable event as part of the response pattern in homeland security, owing to its overriding requirement for the presence of "intent."

With this knowledge of the descriptions of "innocent" and "intent," one gains not only awareness of the principal terms used in Double Effect, but it is also imperative to begin to describe the variables and exceptions that would be recognizable characteristics in a homeland security environment. In that regard, the theology has provided the following: "...exposition of the prohibitory part begins by listing kinds of killing not forbidden by the commandment: killing of animals, execution of criminals, killing an enemy in a just war, killing by accident rather than by intent or design... and killing in self-defense." (Grisez, 1993, p. 476)

On first review, with the possible exception of "killing by accident rather than by intent" (accident being happenstance in crisis events), this list would appear to create difficulty for homeland security personnel since it does not describe the traditional types of circumstances that emergency service personnel encounter in their decision making. However, a closer review revealed that the pivotal issue lies within the definition of the word "killing," which has already been demonstrated as largely a matter of intent. This is reinforced by the realization that if the word "death" were substituted for "killing" in the above, which the theologian/author could easily have substituted, one would be presented with a very different moral issue. It must therefore be that the use of the word "killing" is intentional in order to ensure that the reader applies the issue of intent to the interpretation of the statement. Grisez alluded to that difference and reinforces the concept of the intent being involved by stating: "For gravity is determined by what the agent wills (the object of the moral act), not by conditions and limits on the carrying out of a choice… For the gravity of the matter is determined by the harm the agent wills, not by the harm he or she is likely to effect." (Grisez, 1993, p. 480)

Therefore, a homeland security official is being advised again that "choice" (a decision) can be made within the imposed "conditions and limits" (emergency scene situations) under which a decision is called for, and still, the decision maker's intent is the pivotal moral factor in matters of Considered Risk Casualties. This is also true when those types of casualties are in fact a "side effect" of the decision, similar to that foreseen in the Principle of Double Effect:

So, even if one knowingly brings about someone's death as a side effect, one is not responsible for *intentional* killing if one neither wants the death nor chooses to kill….

Accepting death as a side effect means making and carrying out a choice to do something other than kill and with a purpose other than death, but with the expectation that a death, one's own or another's, will result. *Risking death as a side effect* is similar, but the expectation is that someone's death might result....

It always is wrong to accept one's own or another's death as a side effect of doing something that would be wrong in any case. The instance in which it clearly is praiseworthy to accept death as a side effect is that in which one's own death is accepted in the line of duty or in doing some work of mercy. (Grisez, 1993, p. 482)

4.   The Limits of Duty

If one accepts the premise that homeland security personnel are not motivated to do "something that would be wrong in any case" this observation not only continues to absolve them of moral concerns (under certain conditions) about the killing issue, but it also raises the notion of their own death in carrying out their assigned duties. Grisez provided a scenario that emergency service personnel can identify with, but that on first analysis appears to be contrary to the point he has just made:

...Mary, a firefighter, jumps out of a window into a net to save herself, leaving to the flames a child whom she could and, given her duty as a firefighter, should have saved. She does not intend but only accepts the child's death, and her self preserving act otherwise would be morally good. But since the child's death results from Mary's dereliction of duty, she is guilty of it…

Mary, the fire fighter should have accepted her own death, if necessary to save the child, for saving the child was her duty. (Grisez, 1993, p. 483)

While the author's intent may have been to identify a corollary between "accepting" another's death and the requirements of "duty," an analysis of this scenario by another theologian makes it clear that this scenario, as written, established its own non-sequitur which renders any discussion of the moral question of killing contained in

the scenario to be moot. The problem is one of practical reason in an actual or genuine situation, i.e., if Mary "could" have saved the child, then, there is no reason why she would have jumped from the window without taking the child. If the conditions were such that she was required to jump from the window in order "to save herself," then it is clear that those conditions would have prevented her from saving the victim also. Likewise, it begs the question of how Mary's dying in the fire would have enabled her to save the child. Presumably, had Mary been killed, she would not have been able to rescue the child either (V.Genovesi, personal communication, 9 July, 2008). Hence, this scenario appears invalid for the moral issue in question. It does however surface another major issue, that of concern about the limits of the requirements of duty.

Grisez addressed that issue with great clarity: "In many cases, one's own life cannot be sacrificed without unfairness to others, such as dependents, or detriment to the common good" (Grisez, 1993, p. 484). He again referred to St. Thomas for an endorsement on this point by quoting him: "...because one has a stronger duty to take care of one's own life than another's" (Grisez, 1993, p. 485).

These views specifically reinforce and coincide with that of the philosophers about the element of "duty" in the making of Considered Risk Casualty decisions. Grisez noted not only the duty to survive to "serve the common good" but also that of the emergency service personnel's responsibilities to their own families. These are highly significant issues that force the decision maker to look beyond the immediacy of a situation where there is risk in a localized circumstance to that of the requirements of the wider society that they are also charged with protecting, including their own families. He further refined this point:

> Sometimes one's responsibilities to others make it clear that it is unfair to accept a risk of death to them or even to oneself.... High public officials whose death would be detrimental to the common good take unfair risks if they [fail to take necessary precautions to protect themselves]…
>
> If someone doubts whether it is fair to risk his or her own or another's death, and has no moral responsibility to take the risky alternative even if it is permissible, it's riskiness is reason not to take it, and so it is wrong to do so…

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However, if someone doubts whether it is fair to risk his or her own or another's death, yet would have a clear moral responsibility to take the risky alternative assuming it is permissible, the risk should be accepted...

Physicians, nurses, police officers, lifeguards, firefighters… and so on undertake important duties towards others. At times they must risk their own lives to fulfill those duties..." (Grisez, 1993, p. 486)

Even without concurrence from other disciplines, the homeland security practitioner and decision maker can find sufficient reason in both observations of this theologian to husband and secure the lives of their personnel. This is due them not only because of the intrinsic value they represent as individuals, but also as the resource that they are to the community at large, being responsible for its protection also. While the sense of duty clearly requires that such personnel engage in risks that would be beyond that expected of an ordinary citizen, there is no moral requirement that they sacrifice their lives needlessly to honor that duty.

Another theologian has provided additional examples that are pertinent to concerns about such decisions and the requirements of duty:

For example, [if] I can't swim…. I have no moral obligation to jump into a raging river to try to save somebody who's in that river, but if I were a person, healthy, standing by a small creek and were to see a child in that creek, I would be morally wrong to not save that child, to allow that child to die ... it's morally wrong for me to do nothing in the presence of that child and allow the child to die. Now that's a situation where allowing to die is immoral but allowing to die in other situations would be moral... if I'm a ...fire official, and I don't take any risk I would have a problem with that. So maybe the answer is...we need to put somebody in [the dangerous setting] just to explore the possibility of doing [what is necessary]....We're not just going to say ...'we're not going into the building.' We'll at least make an initial attempt to evaluate, get in there and see what the situation is and then make the decision [if] we go further or not go further. (V. Genovesi, personal communication, 9 July, 2008)

This comment clearly identified situations that denote the limits that exist in balancing risk-taking with the requirements of duty. On the one hand, as homeland security personnel, it is expected by the society that risk-taking be a part of their duties, but they are not expected to extend that duty to the point of their own death. At some

point in the process one reaches a level of risk that ends the commitment to duty. Response scenarios can envision a significant number of other factors that could be considered when trying to determine that balance point. Not the least of these issues is the one alluded to above about preserving lives of emergency personnel on the basis of their commitment to, and requirements of, a wider population they also have an additional duty to protect. The theologian addressed that specifically as follows:

> ...if I've got finite resources, I don't want to put them all, obviously, in one place but I don't want to precipitously say we're not committing any one to [this dangerous situation, because] there are other more important things for us to attend to...we'd have to say the question of how much good can you accomplish given the enormity of the demand right now? (V. Genovesi, personal communication, 9 July, 2008)

This observation would permit the decision maker to evaluate emergency personnel and resources in a calibrated manner that would serve to both address their safety and simultaneously conduct an evaluation of the risk level that is acceptable for the immediate situation as compared to the anticipated outcome. Without question, the level of risk and the possibility of an ongoing threat to others are going to be one of the elements evaluated by the individual charged with making the decision. However, this should not be construed to mean that there is a comparative life value per se, being established between the responders and the victims:

> ...I don't think we want to dispose human life...unscrupulously or cavalierly because the life of your fire personnel, obviously, has value and so you can't ask them certainly to throw your life away. You can't do that, but it's not the same as saying you can't be exposed to risk? No...by their profession they expose themselves every day to risk, or theoretically…. They're exposing their lives to risk every day and they know that. They have taken on that responsibility. It's like saying, is this a calculated risk or is it a foolish risk? And I would say you can't avoid risk in most of our lives, we can't avoid risk, but I think we have the responsibility to avoid foolish risks. That's why... I think their professional training should enable them to say this is a calculated risk, and we have to live with that.... So they make a judgment. Does this building look as though we can do something or not? So it's almost like saying... before we get to the moral question, we have got to have information of a different nature. What is facing us in the building?

Before we can get to the decision about do we commit firefighters here or not commit firefighters here. (V. Genovesi, peronnal communication, 9 July, 2008)

5.   Duty and Proportionality

Theological views on the concept of life loss in this context frequently pivot on the issue of "proportionality" (i.e., lives expended, versus lives saved) (J. O'Connor, personal communication, 6 December, 2007). Many of the influences considered in their discussions establish significant nexus to warfare, healthcare, and also to what would be homeland security actual conditions. Their considerations include: given knowledge, level and frequency of threat, duties of personnel, time availability, and physical distance at the time a Considered Risk Casualty decision is made. As will be seen, philosophers focused their analysis on many of those same influences, and there is both concurrence and differences with the theologians, contained in the nuances of those discussions; yet proportionality is a key factor.

> ...if we were looking at the teaching of the Church on care of the dying, the church says we have to use ordinary means to keep people alive, but it becomes an option to use what they call extraordinary means, but the thing is this, both of those terms, ordinary versus extraordinary means, they now use the word sometimes 'proportionate means' versus 'disproportionate means"…these are relative terms and really you need to make a decision in light of each case. What's ordinary means for one person may be extraordinary means or disproportionate means for another person and you can't predetermine what should be done morally until you know what is the situation of the person and therefore it's not a question of...technology, because we could have very advanced technology and still say in that particular case, if we use that technology its disproportionate given the stage of health of this person…. I'm thinking comparably there…with respect to the situation of using personnel. Is this risk what's called a proportionate risk or calculated risk, prudent risk, or is it really foolish, not prudent at all to use personnel in this particular case? (V. Genovesi, personal communication, 9 July, 2008)

It would appear from this that the sense of duty is neither absolute nor independent of other influences. The amount of resources (technology) would certainly be a factor in determining where that previously mentioned balancing point between duty

and risk-taking exists. If a well-equipped entity has the technology available to match a particular level of threat, then it seems that the weight of duty lies heavier on the decision to extend the risk to emergency personnel. However, even in that circumstance a mitigating factor might be the proportionality of the response, i.e., is it prudent to risk ten to save one? The theologian's views were:

> ...I think this allocation of resources is a real factor in what we're talking about and in health care and so on and so forth... should we spend millions and millions of dollars to keep someone alive? That's a very valid question. I would say no. You made your point when you say this has become prohibitive and so we stop… I would say you come to the conclusion that we really cannot accomplish our intended goal so there's no point in having people go into a situation where their life could be thrown away. Nobody can... risk a life...needlessly...I can't do that. So in a situation like this, we can't throw our lives away, they have value. On the other hand...aren't you a professional? [Yes] I'm a professional. But there's still that calculus that says I shouldn't throw my life away... nor should I stand by idly when chances are good that I can save you. So what we are saying is that there's a need for... some kind of situational analysis, it's kind of hard to use the word calculus because we're not saying any life is worth more than any other life... should we try to save life that can be saved? I would say, yeah, we should try to save a life that can be saved. Have you reached the conclusion honestly, have you honestly reached the conclusion that this life cannot be saved? If so, then I cannot and should not commit personnel. (V. Genovesi, personal communication, 9 July, 2008)

The theological principles involved here can clearly inform the decision-making process, and it is important to note that while the discussion has been about the emergency services situations within homeland security, the decision-making skill sets are not confined to them alone as regards the theological advice. Referring to the previously discussed public health issue, one can note the parallel effect of the observations of the theologian:

> ...we know that I have a limited supply and...have to make some kind of hierarchical distribution... there's a general moral principle that says you cannot be held to what is impossible. So without even getting into a Double Effect Principle, you would simply say no one is obliged to do what is impossible and if it is legitimately established that it's impossible to give everyone a vaccine, and all you can do is to try to make sure that you've had an honest distribution according to the potential of service to

the greater good or the common good, and that's why if you take the analogy, if you take the hierarchy beginning with healthcare professionals and so on, you're assuming that that is the idea of allowing those people to be of service to the rest of the population as best they can. (V. Genovesi, personal communication, 9 July, 2008)

The parallels are unmistakable. The "limited supply" is akin to the finite resources represented by the emergency responders. "To do what is impossible" matches the demand of duty, and the "honest distribution" and the "service to the greater good" equates to the proportionality concept in the decision-making process.

For homeland security decision makers and practitioners the overarching theological guidance was provided in an interview with a theologian as follows:

> ...and I think it's safe to say generally that sound theological principles depend to a large extent on sound philosophical principles and that when you make the theological and moral decision, you can't do it apart from philosophy, but you also can't do it in a vacuum that doesn't take into consideration what we might call empirical facts and the empirical facts are provided by an in-house... social analysis, circumstantial analysis, or what have you, but you need to know the facts to make a moral decision and we begin with general acceptance of the position of the dignity of life and the obligation we have to preserve that, but we do that within the context that this is the real world and so you deal with it as best you can."
> (V. Genovesi, personal commication, 9 July, 2008)

As noted previously, Considered Risk Casualty decisions will invariably result in injury and/or death for some. Such circumstances can create moral dilemmas for the decision maker at the time of the decision, but it almost certainly will in its aftermath. When and where such concerns are a factor for the decision maker, the above theological observations (whether it is the difference between "killing" or "letting die," proportionality, the requirements of duty, etc.) can be measured within the context of their comments. It is obvious that "intent" is a pivotal factor in determining the questions of morality that can arise from these situations. Recognizing that the saving of lives is at the core of homeland security practice, the types of circumstances that can be imagined for the decision maker can find some of their moral concerns assuaged by the above observations. Certainly there are other theologies and belief systems that can be

examined, and the decision maker is urged to do so in order to satisfy any concerns. The purpose of this chapter has not been to debate the merits of different theologies, but merely to demonstrate to the decision maker that the field of theology is flush with commentary that can be accessed to support and define the moral framework within which such decisions can occur. The decision maker is free to draw upon that body of knowledge as may be required.

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IV. MILITARY

A. THE CONCEPT OF LOSSES

Acceptable losses. Upon reading or hearing these words most people recognize and are familiar with the concept connected with the term. It is generally interpreted to mean destruction, injury, or death, while not intended, does exist as an outcome of some other event or activity capable of producing such results. As noted previously in this thesis, the concept is normally found in association with a military frame of reference. During the research and development of this thesis it became evident that while the term enjoyed a reasonably common understanding, it by no means enjoyed a common acceptance. That is not to say that the type of situations it describes were always rejected, but it does admit to a frequent discomfort with the terminology itself since colloquial interpretation would normally consider "acceptable" to mean permissible, allowed, or at least, tolerated. When speaking about death and/or destruction on a possibly large scale, it is not surprising that the expression makes many people ill-at-ease.

It is the nomenclature of the term from which the general discomfort is derived. Governor George Pataki, who was the Chief Executive of the state of New York on September 11, 2001, during interview stated, "No loss of life is acceptable" (G. Pataki, personal communication, 19 March, 2008).[5]. Fire Chief Michael McNamee of the Worcester, Massachusetts Fire Department also said in interview, "There are no acceptable losses." (M. McNamee, personal communication, 23 July, 2008)[6] While both these men and many others understood the concept being referenced, they were adamantly opposed to the suggestion that there was any level of acceptance of destruction, injury, or death within their professional experience.

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[5] The Honorable George Pataki is the former three term (1995-2006) governor of the State of New York. During his tenure he oversaw the managing of major responses to multiple natural disasters in the state, the crash of TWA 800, and was governor during the September 11, 2001 terrorist attack on the World Trade Center.

[6] Michael McNamee is the District Fire Chief with the Worcester, Massachusetts Fire Department. He has been in the Fire Department for thirty-six years and been the District Chief for the last fourteen years. He has lectured nationally about the fire described in the thesis.

There are synonymous terms used in the military to frame the same concept and are described as follows, resulting in similar concerns about them:

> The... choice to use 'collateral casualties' or 'civilian casualties' in conjunction or instead of 'collateral damage' also requires explanation. 'Collateral damage' is a term often used for the group of undesired consequences resulting from a military attack involving either people or property. For those individuals who have lost family members or friends in incidences of 'collateral damage,' or who have been injured themselves, the term 'damage' does not seem to acknowledge the fact that there has been a tragic loss of health or life. While the United States Military has used this term in the past, the Department of Defense frequently used the term 'civilian casualties' during... press briefings. In its published guidance to its legal advisors, the United States Air Force uses references similar to and including 'collateral casualties and damage.'' Similarly, and out of respect for those civilians who have tragically suffered and in deference to potential sensitivities towards the use of anodyne language to describe their travail... [we] will refrain from using the term 'collateral damage' to refer to instances of civilian deaths or injury. (Roblyer, 2005, p. 3)

In addition to sharing the same sensitivities expressed in the above, there is also a concern with its inherent inaccuracy, in that it fails to describe any aspect of the decisions required in the situations resulting in these outcomes. The descriptive phrase that is being used is one that was developed for this thesis: "Considered Risk Casualties." As the author described it, and will continue to note, this is a more accurate term to describe not only the process known to the military decision maker but also, and more specifically, the homeland security practitioner in reaching decisions in such matters. These individuals give great consideration to all the risks involved in making decisions that may, or will, result in casualties. Hence, any destruction, injury, or death that ensues after such decisions have been contemplated, are more accurately described as Considered Risk Casualties. This term describes not only an event outcome (casualties), but, unlike the above military terms, it also describes an element of the intellectual process that preceded the decision (considered risk). It is therefore a more encompassing and accurate description.

Within the experience and practice of war throughout history, the concept of "acceptable losses," and conversely that some losses must therefore be "unacceptable," is

actually a relatively recent phenomenon. In many, but not all cultures throughout history, even some considered highly civilized, it was not an uncommon practice to "put to the sword" entire enemy populations, thus demonstrating a widely held belief that there were no losses that were "unacceptable," at least as it pertained to the opposition. "In the Old Testament, Israel seems to be enjoined to kill its enemies in war. Indeed, the command to kill appears to embrace the whole populations of nations Israel displaces" (Grisez, 1993, p. 474).

Similarly, the term "rape, pillage, and plunder" has not been unknown even in modern times, including the Japanese invasion of Nanking, China, the German drive through Russia, the subsequent Russian capture of Berlin each during the Second World War, or the more recent events referred to as "ethnic cleansing" in the Balkans, or Rwanda and Darfur in Africa. Clearly, none of these casualty causing activities could ever be conceived of as "acceptable."

So where and when did this differentiation implied in the word "acceptable," as opposed to "unacceptable" come from? It could logically be presumed that the conceptual dividing line between them is established in some calculus. Understanding that the military has such vast experience with casualties of all sorts, it would then seem plausible that they possess a wealth of knowledge about the topic and have a finely crafted metric for decision making in such circumstances.

Given that presumption within the realm of military science and tactics, it is odd that there is so little written that would serve as a calculus or about the type of specifics such a calculus would contain. While it is a major consideration for all military commanders, such documentation as does exist is frequently weighted on the basis of the validity of the outcomes, rather than the decision process leading up to it and a significant amount of that is within matters of law. This is not to say there are no guides for the military, indeed, with the possible exception of the medical and law enforcement professions, few operational entities have as many defined rules that they must operate by in life and death conditions as does the military. This is demonstrated by the existence of the Geneva Conventions. What is absent though is any specific metric that might be applied to decision making when faced with Considered Risk Casualty situations. This is

not necessarily an omission, but may reflect the enormous complexity of the circumstances that can be attained in war which would make any such metric overly cumbersome, if not entirely inoperable.

However, similar to other disciplines, the profession of arms recognizes that there are multiple influences manifest in considering these decision issues. Dissimilar to the civilian experience though, the risk-versus-rewards thought dynamic resident in the military decision process is not a balanced equation of values wholly transferable to the civilian realm.

For example, the destruction of life and property is a virtual objective (intent) for all military entities in combat, and therefore enemy soldiers in an opposing army do not occupy equal status to one's own forces at the start of the calculation. The objective is to save one's own forces while destroying the enemies' troops. This is distinctly different from what has been reviewed previously about the need for the intent to be "indifferent." As seen in preceding chapters, particularly in theology with the Principle of Double Effect, "…your initial action has to be… a good action or… a morally indifferent action." (V. Genovesi, personal commication, 9 July, 2008) A defined objective of killing and destroying cannot be considered as an "indifferent action." In the civilian homeland security realm there is never a malicious intent to kill (thereby liberating the homeland security decision maker from the influences of that burden in decision making), but with the military the specific purpose is to kill and/or destroy as may be necessary to achieve a specific goal (the morality of which is addressed within theological discussions of "just wars," which is not a part of this thesis). Thus, analysis of military literature or experience may not be compared as an equal with civilian reviews of situations and outcomes even when discussing similar events. On the surface that would appear to preclude any possibility that military experience in this area could be translated to homeland security matters, but that is not always the case.

1.   **The Geneva Conventions**

The targeting of individuals, locations, and structures outside the specific military forces and support systems of the enemy is proscribed by convention, international law,

and professional ethics within the military in a process that has been the evolving since the nineteenth century. The initial intent aside, the considerations that the military commander is faced with in decision making with regards non-combatants, is very similar to the issues discussed in the context of civilian homeland security circumstances, and there appears to be much that can be derived from that military evolution. Conversely, as the type of events that homeland security and emergency service personnel can now find themselves preparing for and responding to are in fact acts of war, the type of decision making circumstances that are familiar in military conflicts are the very types of events that these civilian forces can gain benefit from reviewing. Additionally, for both the military and the homeland security practitioner, it is probable that they will again be working concurrently on the scene of emergencies and disasters that will require they appreciate and understand each other's analysis of the immediate conditions in which they are operating in order to more effectively work together, such as at the Pentagon on September 11, 2001.

Dale Stephens and Michael W. Lewis have reviewed the analysis of dozens of writers concerning the plethora of issues that are involved in *The Law of Armed Conflict* (Stephens and Lewis, 2005, p. 1) and in view of their aggregation of so many observations; their analysis will be cited frequently in this chapter. Two of the prime legal and moral influences concerning warfare are found in the Latin terms: *Jus ad Bellum* (the right to go to war) and *Jus in Bello* (rights during war) (Stephens and Lewis, 2005, p. 2) will not be addressed in this paper. The moral and legal views concerning the requirements of going to war are likewise not discussed, inasmuch as the homeland security decision maker in the emergency services does not typically participate in those decisions. This thesis will however discuss the modern requirements of how war is permissibly fought, particularly the limits upon it, for therein lies the concomitant issues between the military and civilian decision makers. These authors advised that*:* "The 'just war' tradition, as understood within European Christian theology, usually accorded a level of civility in the conduct of warfare between Christian antagonists... the 'just war' tradition was informed by the perceived justness of the cause..." *(*Stephens and Lewis, 2005, p. 3).

While this evolves from the type of theological tradition previously reviewed, those traditions eventually became a more substantial and codified legal process defining the proper conduct of war:

> The 1863 Lieber Code and the 1868 St. Petersburg Declaration ... focused upon regulation of methods and means of warfare... [and] expressly recognized that the methods and means of warfare were not unlimited…This order was manifested through the development of finite rules and found expression in the modern law of armed conflict as it developed in the mid-19th century. The numerous Hague Conventions concerning warfare, and the nascent customary law which began developing during the late 19th and early 20th centuries, have been correctly characterized as constituting the first 'human rights' oriented treaties in their recognition of soldiers, sailors and (to a lesser extent) civilians as the beneficiaries of state-centered rights. (Stephens and Lewis, 2005, p. 3)

Thus one can see that humanitarian interests started to have a place in warfare that continued to evolve over time into a doctrine familiar today, the Geneva Conventions.

> ...the drafting of the 1949 Geneva Conventions [35] and the subsequent... 1977 Additional Protocols [36]... were incorporated into the modern law of armed conflict and the broad principles propagating 'balance' between military and humanitarian goals were subsequently enshrined in the resulting Conventions [38]....

> It is here that we find emphasized the reassuring central principles of 'distinction' and 'proportionality' which are the bedrock's of the modern law of armed conflict. [40].... In essence, the principle of distinction stipulates that only military targets may be attacked. [41] Proportionality requires that any incidental civilian injury or damage to civilian property arising from such an attack be proportional to the military advantage anticipated. [42] (Stephens and Lewis, 2005, p. 4)

Specifically, Michael Schmitt provided a definition of "distinction" which is recognizable as similar to the theological concepts and issues previously reviewed as a question of "intent:"

> The core principle of distinction is found in Article 48 of Protocol [sic]. It provides that "Parties shall at all times distinguish between the civilian

population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives. (Schmitt, 2002, p. 1)

Noting as discussed previously that "intent" (or distinction) has mutually exclusive connotations between the military and homeland security personnel, the point will not be addressed further. Rather, the focus will be on that which provides the greatest similarities and lessons for these two disciplines, "proportionality." Schmitt also provided a definition of proportionality:

> Set fourth in Articles 51 and 57 of Protocol I, and unquestionably a component of customary international law, proportionality is a principle of distinction that prohibits any attack expected to cause a loss of civilian life (or injury) or civilian property damage that is "excessive in relation to the concrete and direct military advantage anticipated." The principle applies when civilians or civilian objects are not the intended target, but injury or damage to them is likely during the course of an attack on a legitimate military objective. (Schmitt, 2002, p. 5)

> Having reviewed the philosophical and theological observations of the dynamics in play in these crisis situations, one should immediately recognize their similarity with the military dynamics. They may have different names, but the concepts are remarkably familiar.

a. *Homeland Security and Proportionality*

From the above it becomes immediately manifest that the issues concerning the military commander are not substantially different from those already reviewed for the homeland security decision makers. The authors identify multiple other writers in supporting and clarifying the types of influences that exist in military decision making. The similarities are seen below:

> ...concepts such as distinction and proportionality are notoriously broad and susceptible to wide degrees of interpretation. [47] The broadness of these principles creates intractable dilemmas concerning the assessment and execution of each mission....

> The test of proportionality necessarily requires an assessment of the military value of a particular target, balanced against the expected loss of

life resulting from an attack. Accordingly...[the decision maker] is confronted with the questions of how to value human life and how to ascribe relative values to enemy lives, both civilian and military. In addition, the planner must also determine the acceptable level of risk for one's own forces and the degree to which that risk should vary to potentially decrease civilian casualties…. When incorporated into operable rules of engagement, difficult choices need to be made, choices that vigorously test the limits of the concepts... commanders will often conclude that it is a 'judgment call' [49] that needs to be made when deciding the cost of an attack. A commander is certain of the obligation to protect soldiers, sailors and airmen within his or her command, but must grapple with this obligation when directing an attack and must make crucial decisions regarding these lives as well as those of the opposition. (Stephens and Lewis, 2005, p. 5)

With scant effort one can transpose the word "attack" into "rescue," and the two designations of the lives of friendly forces and that of the "enemy," into that of the emergency services and trapped civilians that was alluded to in previous chapters, and will surface again subsequently. With such a change one immediately recognizes that a military decision situation has similarities to the circumstances facing a fire chief who, when ordering an "attack" (rescue), must weigh the cost of accomplishing the mission to the rescuers, as compared to the value of the objective (being rescued) to the trapped. One can see this as homeland security "proportionality." However, there is a difference in the scale of the scenarios and the related decisions made by the military personnel in that they can be substantially greater (at least to date), based on scale than is that of their civilian counterparts. This is evidenced by findings of the Justices of the International Court of Justice; one of whom observed the following:

It must be that, in order to meet the legal requirement that a military target may not be attacked if collateral civilian casualties would be excessive in relation to the military advantage, the 'military advantage' must indeed be one related to the very survival of a state or the avoidance of infliction (whether by nuclear or other weapons of mass destruction) of vast and severe suffering on its own population; and that no other method of eliminating this military target be available. (Stephens and Lewis, 2005, p. 7)

This finding concerning the use of nuclear weapons describes how permissible or impermissible attacks must be related to the value of other acts in a way

that is similar to the Principle of Double Effect, and also meshes with the philosophical and theological concept of proportionality noted above. That concept is so pervasive within the condition of this military decision making that it has been codified as part of the previously described Geneva Conventions: "Upon ratification of Additional Protocol I, certain states made declarations regarding the determination of an acceptable loss of civilian personnel within the proportionality equation" (Stephens and Lewis, 2005, p. 8).

While being less pervasive in the civilian context, the circumstances under which the military decision maker and the homeland security practitioner operate comes even closer together as can be demonstrated by introducing the homeland security frame of reference into an issue raised within the military context below:

> The law of armed conflict does not require that a nation needlessly sacrifice its own military members [rescue personnel] in order to minimize incidental civilian injury [112].... One obvious area of intersection concerns the rights of the nation's own military members [rescue personnel] and the risks to which they must be exposed [the duty requirement] to preserve the lives of civilians of the enemy nation [trapped victims]... the 'security of the attacking force' [responding rescuers] will indeed be factored into the proportionality equation. (Stephens and Lewis, 2005, p. 10)

This is virtually the identical argument, as seen previously in the theology chapter and will be re-visited in the philosophy chapter, concerning the extent to which duty can be a factor as regards the increasing risk to rescue personnel. However, even if one grasps the concept of proportionality, in the absence of a defined calculus, the judgment as to what in fact is "proportional" still remains with the individual decision maker. This is a critical and pivotal issue and is approached in the military literature as follows:

> The modern commander is compelled to weigh the loss of all lives (enemy, civilian and own forces) when planning an attack and, under the prevailing law, must apply requisite values to both lives and military objectives when deciding whether the proposed attack meets the proportionality criteria. These values are shaped by both the cultural background of the officer as well as the significance of the military objective and the broad cost of securing it. This is not to imply a mathematical certainty, but does require that a decision actually be made

and values ascribed to what losses are justifiable. Discretions are broad and the factors which apply to determine these respective values are a product of judgment….

To the extent that decisions concerning target selection under the principle of proportionality are based upon value judgments, they will necessarily reflect the values of the military commander making those judgments….

Different military commanders from different cultures bring their own moral compass as well as their own sense of value regarding 'military objectives' to the target planning process. (Stephens and Lewis, 2005, pp. 10, 11, 12)

b. *Personal Characteristics and Decisions*

Thus, here one arrives at one of the most consequential issues in both military and homeland security decision making, and that is, in the absence of a defined calculus that can be used to evaluate proportionality ("a mathematical certainty"), one must rely on the nature and experience of the individual charged with making the decision.

As will be described in the chapter on philosophy, the value systems and structure of individuals' vary widely from person to person. This is what is being alluded to in the above comment about "judgment," "values," and "different cultures bring their own moral compass" to the decision-making process. This effectively informs one that even given relatively similar situations, the decision to act, how to act, or not to act at all, can be made in such a way as to result in dramatically different outcomes. All other things being equal, the cost in lives can be minimal or significant based on the moral views (values) of the decision maker. It is an open question how this pivotal variable can be overcome to the benefit of those in need and to society as a whole. There is no question that in lieu of a defined calculus, a military, even one as advanced as that of the United States, relies heavily on the judgment of the individual commander. This was specifically addressed in an interview at West Point with an Army officer and professor of philosophy concerning the basis of decision making in a military context.

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...there's no kind of slide rule you can pull out or work at. It's going to be much more [a situation of] depending on ideally, the good character, the experience, and the judgment of that person on the ground who, as a military professional has hopefully taken on and internalized the idea of the military ethic and carries out those things in a moral manner....

Clearly people who enter into the military already come in with a worldview of their own. We all come in with our worldview shaped by our culture and our parents and our religion or whatever other things we believe in... so when faced with a situation like that, a person of good character, which we hope as officers and gentlemen we'd all be, would then... understand and know what to do ...In the Army I think we like to think more in terms of that person's good character being in the forefront, and... understanding what to do rather than be bound by some kind of rigid set program, particularly when one understands that there's so many different formulations that any checklist seems to be one that would somehow be incomplete with all the strange things that could perhaps happen in the real world that we couldn't even imagine, so I think in that case what comes to the forefront is the person's training experience and character and the hope there that that person is a good person, and a moral person, and does the right thing and makes the right decisions. (B. Imiola, personal communication, 19 May, 2008)[7]

Of course it must be noted (and the professor stressed) that institutions like West Point go to great lengths to inculcate a professional ethic and a value system supported by numerous types of operational experiences to gain an education in command. This dramatically reduces the potential for great variables in outcomes through reliance solely on an individual's character. Unfortunately, such education is not a universal experience for all the militaries of the world. Indeed there are overwhelming examples throughout history of military organizations inculcating value structures that could never be considered as moral. Some of those locations and outcomes were listed earlier in this chapter. Nevertheless, it still remains that the moral character of an individual decision maker is a consequential factor in making decisions about Considered Risk Casualties. Later in this thesis it will be shown that the exact same condition exists in the civilian emergency services.

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[7] Lieutenant Colonel Brian Imiola, United States Army, holds a Doctorate in Philosophy from the University of Buffalo. He is a faculty member of the United States Military Academy at West Point where he teaches philosophy.

In discussing the definition and legal requirements of proportionality, Schmitt addressed the difficulty of the decision-making process required by proportionality that would seem to suggest, as Imiola at West Point alluded to, that while moral character is a significant element in arriving at "right" decisions, it is not in and of itself sufficient to guarantee that outcome. "This balancing test is extraordinarily difficult to conduct because it requires quantifying and comparing dissimilar values.... The "value" of an object depends on many varied factors – the circumstances of the conflict, one's culture, one's historical and experiential base, etc." (Schmitt, 2002, p. 5)

In his 2003 paper concerning decision making and collateral casualties, Robyler supported the value of the multi-pronged approach such as that being applied at West Point and, noted above by Imiola, to support the morals based decision maker by advising that:

> Operating within this setting of conflicting principles and potential biases and working to oppose breakdowns in moral resources are three related mechanisms: the professional military ethic within each military member, the law of war training provided regularly to them and the counsel available from military legal advisors. (Roblyer, 2005, p. 28)

Roblyer further emphasized the difficulty of decision making by referencing the International Criminal Tribunal for the Former Yugoslavia committee charged with reviewing the bombing campaign over Serbia and quoting the committee thusly:

> The main problem with the principle of proportionality is not whether or not it exists but what it means and how it is to be applied.... It is much easier to formulate the principle of proportionality in general terms than it is to apply it to a particular set of circumstances because the comparison is often between unlike quantities and values. One cannot easily assess the value of innocent human lives as opposed to capturing a particular military objective. (Roblyer, 2005, p. 12)

He then went on to provide a list of questions the committee identified "...that remain even after one has decided to apply the principle of proportionality." (Roblyer, 2005, p. 12) Reading them with the type of military to civilian homeland

security transposition of terms used above makes them an excellent description of the emergency service decision maker's issues. The committee's questions were:

1. What are the relative values to be assigned to the military advantage gained and the injury to non-combatants and or the damage to civilian objects?

2. What do you include or exclude in totaling your sums?

3. What is the standard of measurement in time or space?

4. To what extent is a military commander obligated to expose his own forces to danger in order to limit civilian casualties or damage to civilian objects? (Roblyer, 2005, p. 12)

He advised the reader that ultimately, "...the committee acknowledged that answers to these questions would necessarily vary from case to case and could differ depending on the experiences and the values of the decision maker." (Roblyer, 2005, p. 13)

c.   Assistance in Decision Making

One might suppose that given all the provisions of the Geneva Conventions and the continuous worldwide legal analysis that the Conventions and their implementation are subject to that there would be a metric established for proportionality, or what Imiola referred to as a "checklist" that would simplify the decision-making process. Robyler relieved the reader of that hope by noting, "... *Just War* moral principles and doctrine provide few, if any, specific guidelines to help military decision makers value and weigh alternative choices in the very chaotic environment of war." (Roblyer, 2005, p. 10) In fact, rather than pointing in an alternative direction to find such assistance, he further made his point by stating:

> ...the "decision environment" in which these public servants find themselves is a very complex one with regard to the guidance and considerations they must weigh. It is also an environment filled with physical, mental, and emotional stress, in addition to what the military calls the "fog of war" – the uncertainty that results from the lack of adequate, correct information. (Roblyer, 2005, p. 23)

In his chapter on Moral Decision Support for the War Fighter, Robyler started to search for assistance for the decision makers: "Given the difficulties of the proportionality decision that are still left unanswered... it seems clear that military decision makers could benefit significantly from additional decision support targeted at these issues." (Roblyer, 2005, p. 27)

In a subsequent chapter he returns to this theme about the benefit of acquiring additional support:

> Decision makers can and should be better informed of which moral conflicts exist in their decision environment, why they exist, and how their associated biases can be minimized. They should also be alerted to the potential of other traps in their moral thinking. This information will not alter the military members' accountability under international law, but will better prepare them to address important moral issues within and beyond the legal dimensions of the dilemmas they must face. (Roblyer, 2005, p. 33)

It is reasonable to ask why seeking this additional and possibly external advice is necessary. One would opine that a cursory review of both the World War II and more recent "ethnic cleansing" activities in the world would provide sufficient reasons for seeking additional information in military decision making. There is no suggesting that there is a parallel between those enumerated crimes and the types of activities that the United States military is continuously faced with and/or operate within. Of course, this is even truer in the homeland security environment. What this thesis is emphasizing, though, is that in the Considered Risk Casualty circumstances that both military and civilian decision makers currently, and in the future, will find themselves, both mutual, internal, and, importantly, external input can serve to assist them with these most troublesome burdens. Lest one focuses only on his articles' past examples to describe the need, it is noted that Schmidt offered advice about the future possibilities that not only the military, but also homeland security personnel will be faced with as a result of the changing style of warfare: "I expect to see a growing tendency to directly target civilians and civilian objects, both due to the spread of terrorism and as a result of capability gaps that will drive the "have – not" forces facing advanced militaries into asymmetrical strategies and tactics" (Schmitt, 2002, p. 7).

In light of this changing battlescape and the demands that it will place upon the decision makers, Schmidt noted that there can be a benefit gained for them through the following means:

> Although it is not my purpose to comment on the ethics of future war, I would suggest that ethical precepts could prove invaluable in assisting humanitarian lawyers, policymakers, and combat leaders to interpret the existing law in the context of new methods and means of warfare. Moreover, ethics can assist them in determining how best to fill normative lacuna in humanitarian law that will become increasingly apparent over time. Thus, I enthusiastically welcome... [an]... initiative… to create a dialogue between the legal and ethics communities. Such a dialogue is essential as we contemplate, and prepare for, 21st century conflict. (Schmitt, 2002, p. 8)

In this, one can see the author suggested and endorsed the belief that these military (and therefore homeland security) situations will involve such complex decision-making requirements that it will be beneficial, if not necessary, to draw on the knowledge of other disciplines to make valid and sustainable decisions. It appears that Robyler has independently reached a similar conclusion.

> Principles and cautions from ethics and judgment and decision making provide different and important lenses through which to view the very difficult issues posed in the targeting process. More fully incorporating these concepts may contribute to better moral preparation of the United States military decision makers and, in the final analysis, may contribute to making wars of the future less costly in terms of innocent lives. (Roblyer, 2005, p. 35)

By extrapolating from the historic and current military experience with Considered Risk Casualty circumstances over many years and in many locations throughout the world, it is quite clear that for their civilian counterparts, there is much that can be learned from military history and methodologies. This is particularly true in the current asymmetrical warfare environment that exists, since the line between what constitutes a military operation and a civilian one is no longer as well defined as it has been previously. While neither the military nor the homeland security professional have any "checklist" to assist in their decision making, it could be suggested that due to such things as the Geneva Conventions, the military has more guidance available to them than

does the homeland security practitioner. If, therefore, the above noted military experts and writers recommend additional assistance for military decision makers in that task, how much more necessary might it be for the emergency service managers who do not have a document concomitant to the Geneva Conventions, nor do they have a wealth of experience to draw on in the environment of asymmetrical warfare that is being visited upon them?

As one can see in this chapter, the issues that have for all too long been considered to be exclusively within the purview of the military are, in fact, directly parallel to the types of the decisions made by the first responders throughout the country, albeit of a different scale. One would be wrong to imagine that the scale could ever make the decision and its outcomes any less tortured for the local fire chief than it does for the military commander. Ultimately, however, the decisions required of both those individuals, inevitably occurs in an environment that is described by Robyler thusly:

> The combination of the pressures and high-stakes of the wartime decision environment, the moral-legal tensions and the resulting conflicts, and the well-trained, but fallible, human beings making the decisions are unavoidable factors. It is precisely because these factors are inextricable that the human decision makers deserve the highest quality decision support that can be made available to them. (Roblyer, 2005, p. 30)

As one considers the visiting of Considered Risk Casualties upon the civilian population and the propriety of responses to it, it is instructive to note the above rapidly changing dynamic and realize the influence that a plethora of factors, or even just one, can have on the decision process. Conversely, an array of solutions, or just one, derived from seeking other observations and information as suggested by the above authors, can also influence the decision process and assist the decision maker.

V. PHILOSOPHY

A. PHILOSOPHICAL SCENARIOS

There are multiple branches or schools of philosophy such as, deontology, consequentialism, and non-consequentialism, to name a few, but the focus of their individual inclinations within the wider discipline of philosophy is not particularly germane to this paper insofar as the thesis objectives are concerned. It is more important to be aware of some of the types of issues they address among themselves.

A methodology that is traditionally used by philosophers to advance their discipline is done through a process of discussion of problems presented in various scenarios. In essence, a philosopher wishing to present a point of view contrives a scenario wherein the situation they intend to discuss is presented and analyzed. The philosophers' main point and variations upon it are described through creating an unlimited number of modifications or contrivances to the original, artificially crafted scenario. The ensuing debate, through which the thought process is advanced, is given as commentary, contrasts, support, comparisons, variations, and opposition by other philosophers in the form of wide-ranging arguments and/or the addition of other points of view to the original philosophers' statements and scenario.

Harvard's Dr. Frances M. Kamm, a noted philosopher, has for decades written extensively on a wide range of topics that are pertinent to this thesis. Her numerous articles, papers, and books have examined such topics as: Does Distance Matter to the Duty to Rescue; Moral Issues in Rationing Scarce Resources; Moral Intuitions, Cognitive Psychology, and the Harming-Versus-Not-Aiding Distinction; Killing and Letting Die: Methodology of Comparable Cases and Conceptions of Moral Equivalence; Harming Some to Save Others; Morality, Mortality, etc. Dr. Kamm's observations and scenarios are frequently inclusive of, and responsive to, a large number of other philosophers and commentators. In that sense, a review of her literature provides a reasonably comprehensive analysis of the contemporary material with a nexus to the topic of Considered Risk Casualties. Due to the pertinence of her material, the author frequently

noted her thinking in this chapter. That reliance commences with her description and purpose of this scenario methodology, and is as follows:

> ...philosophers use intrapersonal, not interpersonal, testing of cases, so the errors resulting from the latter need not threaten their results. Indeed, when a philosopher relies on her intuitions, she typically begins with one case, and then the same philosopher automatically considers whether she would have the same response in another case in which certain factors are modified from the original. The basic requirement of moral rationality, that we universalize the maxims of our conduct, itself embodies the requirement that one person consider many cases in which an act would be performed and not just one. However, the fact that philosophers do not respond to one case without thinking of another, and the possibility that they get different results by checking through a set of cases than if they had responded to one in isolation, would threaten an assumption about the purity of the intuitions." (Kamm F. M., 1998, p. 1)

In order to participate in the debate, it is mandatory that each philosopher be fully conversant with the original scenario. That will not be required here, since this thesis is not about philosophy per se, nor is it attempting to add to a debate. Likewise, this is not about the scenarios created by the philosophers to make their point, and it is most certainly not about the "right or wrong" inherent in the debates between philosophers or different schools of philosophy.   The purpose of this chapter (and this thesis) is to demonstrate the range of issues and dynamics that can be present in individual decision-making situations for homeland security personnel, particularly where those decisions concern matters of life and death, and to familiarize the reader with the range of philosopher's comments about those issues. Throughout this thesis one will see that other disciplines have observations that can have a relationship to homeland security issues, but this thesis will not be entering into their debates either because it is not examining the merits of their internal debates, rather, the author of the thesis is noting that within the discipline there can be found matters useful to homeland security decision makers.

In previous chapters two selected homeland security situations for the issues being considered in this thesis were presented. Those same situations will serve as the vehicle through which the observations of the above described philosophical thoughts will be presented, with the addition of a third situation of the author's creation. In short, three situations will serve as homeland security "scenarios" and the terminology germane

to them will be substituted in brackets where necessary, to transpose parallel observations about, and from the philosopher's original artificial scenario into a homeland security one.

The homeland security "scenarios" (**S**), are as follows:

S1) The order is given to the military to shoot down a hijacked commercial airliner on the morning of September 11, 2001.

S2) The creation by public health agencies of a prioritized list of vaccine recipients in the event of a pandemic disease is established as a national recommendation.

S3) A circumstance involving decision making by authoritative individuals in homeland security agencies, at any level of government, to expend or not expend emergency personnel and resources to assist and/or rescue individuals trapped in life-threatening situations.

Each of the above situations (S1 through S3) involves decision making that includes a Considered Risk Casualties outcome. S1 is a terrorist based situation, and S2 and S3 can be terrorist initiated or as a result of a natural or "all hazards" emergency.

As seen in the chapter on theology, the Principle of Double Effect (PDE) serves as a primary consideration in western culture for issues of acceptability of the conditions under which intentional, and particularly, unintentional deaths can occur. The philosophical observations referenced to scenarios S1 through S3 can, for the purpose of this thesis, be understood to trace their genesis to PDE, however, it should not be considered as an exclusive source or continuum for the philosophers.

The philosophical observations being considered herein are:

A.   The rationing of scarce resources.

B.   The duty to rescue.

C.   The difference between "Killing" and "Letting Die."

D.   Harming some in order to save others.

E.   The distinction between harming and not aiding.

The matrix of homeland security scenarios (S1 through S3) to philosophical observations (A through E) being discussed are presented below in Table 1. Not every

observation has a scenario associated with it in the chosen examples. However, in actual events, a full range of combinations could be possible.

Table 1.   Philosophy Issues in Homeland Security Scenarios

PHILOSOPHY ISSUES IN HOMELAND SECURITY SCENARIOS			
ISSUES	**SCENARIOS**		
	1	**2**	**3**
A: The Rationing of Scarce Resources		The Pandemic Vaccine Distribution Plan	Assisting or Not Assisting Individuals in Life Threatening Situations
B: The Duty to Rescue			Assisting or Not Assisting Individuals in Life Threatening Situations
C: The Difference Between "Killing" and "Letting Die"		The Pandemic Vaccine Distribution Plan	Assisting or Not Assisting Individuals in Life Threatening Situations
D: Harming Some to Save Others	Ordering the Destruction of a Hijacked Airliner	The Pandemic Vaccine Distribution Plan	
E: The Distinction Between Harming and Not Aiding		The Pandemic Vaccine Distribution Plan	

In this chapter, and through the above matrix process, one can begin to bridge the gap between the abstract and real-life. A series of three examples will be stated and various categories of abstract, philosophical discussions will be linked to the examples to reveal that there is a nexus between them. Following each example and it's categories of philosophical commentary, a statement of pertinent issues will encapsulate the discussions. By this process it becomes clear that homeland security and other disciplines have mutual areas of concern; the shared knowledge of which can be beneficial to all parties.

B.   PHILOSOPHY AND THE RATIONING OF SCARCE RESOURCES

1.   Issue A / Scenario 2

(The creation by public health agencies of a prioritized list of vaccine recipients in the event of a pandemic disease, verses] the rationing of scarce resources.)

As seen in the chapter on bioethics, multiple views exist about the propriety of a hierarchy of recipients for the distribution of a limited supply of vaccines, and even in those cases where such a prioritization is accepted, there exist different views on who should be considered as having priority status. Kamm proceeded through a series of questions and responses to these same types of issues but also added to the discussion the matter and importance of anticipated outcomes, and she thereby demonstrated an array of issues that can be informative for the homeland security decision maker.

> A fundamental issue is whether we should think that we are allocating resources or rather the benefits that may come from resources. (In "benefit," I include prevention of harms.).... I assume that we are concerned with the allocation of resources, though as we shall see, sometimes concern for benefits that come of the resources must come into the picture.
>
> Sometimes, when we do not have enough resources to help everyone, some of our resources will go to waste if we help some people.... Hence, the best allocation of resources is not necessarily the one that uses up all the available scarce resource (Kamm F. M., 2007, pp. 263, 264)

Even a cursory examination of the CDC vaccine distribution plan made it evident that its system of application and benefits aspect were the prime drivers of the plan. However, the question of the volume of available vaccine was not directly addressed, and one is left to presume that the distribution will continue through the prioritized list and cease at whatever point the available vaccine supply is expended. In the event there was only enough vaccine to inoculate the health and emergency workers, then there would be no benefit in doing so, inasmuch as the reason for their being inoculated (to maintain their health to treat others) would become a moot point if there were no vaccine remaining to treat the rest of the population. Thus, immediately one is presented with an example of how the observations of the philosopher can assist the "agent", as Kamm frequently referred to a practitioner, and for the purposes of the thesis, the author will use to also mean the homeland security decision maker, in making real-world decisions through the introduction of a valid, additional issue (the volume of vaccine) that may have not been previously considered. Kamm provided further examples as follows:

> ...someone who does not have and will not have any [vaccine] has greater need for [vaccine] than someone who has and will have many [vaccines]… Someone who has had many [vaccines] in the past, though she now has none and will have none in the future, does not necessarily have a greater need for [vaccine] than someone who has and will have some but not as many [vaccines] in the future (other things equal between them). It seems reasonable to think that past access to resources should affect our decision about neediness…. It is possible that not all differences in need are morally relevant. For example, someone who has had one [vaccination] is slightly less needy of [vaccination] than someone who has had none, for he can already [have some immunity]. (Kamm 2007, p. 265)

She also brought up other aspects that the policy did not discuss such as "urgency:"

> It might be thought that how we allocate scarce resource should depend on urgency.... But if a resource is truly scarce, a less urgent person will never be helped. So, why should it matter that he could wait to be helped by contrast to the more urgent individual? Where life is at stake, being able to wait for treatment means that one will get more life than someone else will, even without our help.... The less urgent person can wind up just as deprived if not helped as the more urgent person. (Kamm, 2007, p. 267)

Kamm also addressed the aspect of "responsibility" as follows:

> What if some are causally and morally responsible for being in need or for the fact that they will have a poor outcome if given resources? Typically, one thinks of such cases as involving some moral defect: for example, failure to take precautions, or self-indulgence. (Kamm, 2007, p. 267)

It is clear from these few examples and multiple others she makes available that the philosopher introduces a number of decision-making considerations and dynamics that may have been examined in developing the vaccine distribution plan. However, since complete details are not available about the vaccine distribution planning process, the reader must view the plan as presented and combine its elements with Kamm's observations to imagine the type of complex environment that could result in a Considered Risk Casualty situation whether or not it was considered in the evolution of the plan. The above are not negative commentaries, but observations about various influences. Indeed, there are multiple endorsements of the plan as it is currently constituted. The distribution plan, once the health and emergency workers needs are addressed, went on to identify other individuals with high risk and high consequences to disease as the next most important recipients of the vaccine. Kamm recognized the appropriateness of this decision through use of the following generic observation:

> Even if someone is in greater need of [vaccine] he may not be as [healthy] and hence there may not be a very great increase in his abilities per unit of resources. By contrast, someone who does not have as great a need may produce a much bigger outcome per unit of the resources. (Of course, these predictions are subject to error, so that they are really views about expected outcome ... but it could be relevant to allocation that we are more certain of outcomes in one group then in another, even though the latter has the potential to achieve better outcomes.) Sometimes, differential outcomes should be relevant in allocation... (Kamm, 2007, p. 265)

If one presumes that health and emergency workers are healthier than others and are able to perform to their professional abilities and therefore do not have "as great a need" as other groups mentioned in the plan, then their ability to inoculate many others will result in that "much bigger outcome" intended. Similarly, the differentiation of high-risk groups for a sequence of vaccine allocation is obviously a parallel to Kamm's observation about "potential to achieve better outcomes." In this observation one sees the

philosopher endorsing a policy decision outside her discipline area; public health. She did, however, note certain cautions that must be calculated in the agent's decision process. In her chapter, Equal Numbers with Different Characteristics, she noted: "The decision that it is better morally to produce more in some people than an absolutely minimal benefit in everyone may be based on the significance of *indirect benefits to the very people who would be deprived of the resource in question.*" (Kamm, 2007, p. 268)

Kamm continued to emphasize this point further by stating:

> ...sometimes (though not necessarily always), the loss of a small good could be morally significant when it is occurring to the neediest, especially if they are very much needier than those we would aid. Hence, we must be aware of the *mechanism* by which our allocating to one-party results in the absence of a small benefit to another party before we can ignore the level of need of each party... (Kamm, 2007, p. 271)

a.   *Issues*

The above appears to endorse the current distribution plan, and in fact, it recognizes those most at risk (neediest). It does, however, place a requirement on public health to ensure that those priority health and emergency workers are in fact performing their duties in a manner that required and permitted them to receive the vaccine first. Therefore the usefulness one sees in the review of the philosophers' observations not only can be beneficial in the decision-making process, but, in some cases, the operational application of the decision can then serve to validate that same decision. At a different level, it is also clear that these abstract observations can have a direct relationship to actual homeland security issues.

2.   Issue A / Scenario 3

(A circumstance involving decision making by authoritative individuals in homeland security agencies, at any level of government, to expend or not expend emergency personnel and resources to assist and/or rescue individuals trapped in life-threatening situations to include the rationing of scarce resources.)

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The above scenario is based on actual, identifiable conditions that have been reviewed with the philosopher's observations from an abstract context in order to demonstrate the nexus that can exist between the real and the abstract. In S3, one is presented a contrived scenario that is based on a full spectrum of events that emergency managers and practitioners are presented with on a daily basis. These events could range from miners trapped in an underground tunnel to a driver caught in a burning car, to firemen caught in a warehouse fire, to hundreds of people trapped in a skyscraper in danger of collapse.

While these descriptions may remind one of circumstances that have actually happened, the author presents them as generic to note the fact that an emergency manager in each of these cases must make a decision to use the personnel, equipment, and other resources that are available to go to the aid of the victims. Recognizing, as noted in the introduction, that emergency service personnel (fire, police, EMS, etc.) are a valuable and finite resource, and the conditions of greater hazards and threats under which they are tasked has increased, it is manifest there are now additional considerations that can apply when allocating these resources. Traditionally, the emergency manager has always been required to consider the safety of the emergency service personnel before committing them to a potentially life-threatening condition. That requirement is still true. However, in an age of weapons of mass destruction and terrorism there are additional factors that can be at play in these emergency situations that involve the dynamic of "intent." It might be possible that the emergency workers themselves are the target of terrorists or it may be that the type of incident that has been created has been intentionally designed to overmatch the emergency response capabilities of a community. It is also possible that additional, more severe, and/or more frequent or simultaneous events can befall a locality placing excessive demands on the finite response resources. This change and the increase in the threat environment that translates into a level of increased risk for response personnel will of necessity add additional considerations to the emergency managers' decision-making responsibilities as regards the allocation of scarce resources. Philosophy has provided observations and insights that can be useful in this area.

Is it a question of deciding between individuals here and now by persons who have certain professional responsibilities for the resources? For example, is a [fire chief] deciding who should get [rescued] when not all can get [rescued]? This is a case of what I call "microallocation." By contrast, is it a question of deciding for populations in existence now or to come, where the decision is how much to invest so that certain resources will or will not be available for microallocation and the decision is to be made by someone who was charged with this microallocation problem? What factors it is permissible or obligatory to consider may vary with the context." (Kamm, 2007, p. 264)

Kamm has identified a problem described in the above scenario, in that both conditions she questions can be present. The fire chief clearly has a professional responsibility for the resources and must make a decision about who is to be rescued (a traditional concern) and now may be required to consider the immediate circumstance in comparison to future and/or other additional situations.

First, let us look at principles for allocation where the choice affects an equal number of people whatever we do and all the people in any given non-overlapping group in competition for resources are relatively identical in need and outcome, but the groups differ between them in these respects. (For example, each group has five people, but one group's members are needier than another group's members.)

(a) If the resources in question are divisible between groups we do not have to choose to give to some and not to others, for we can give everyone a bit. Divisibility, however, should be constrained at least by producing some good outcome in each person, even if it is minimal.... Deciding not to divide the divisible good to the point of minimal benefits represents a concern for outcome in each person as an individual. That is, even if the very minimal benefits in everyone when aggregated would create an enormous sum of benefits, this might not be as morally important as some individuals getting substantial changes in their lives." (Kamm, 2007, p. 268)

In other words, how and where does one choose to assign the emergency personnel based on probable benefits or outcomes?

The philosopher proceeds through a series of questions and conditions relative to allocation of resources and comes to the below noted observations titled *Different numbers of people* among others:

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These cases suggests that we owe each individual something in addition to pairwise matching, namely to balance and silence them only when the nature of the need of the additional persons is serious enough relative to their own need. This really means that we should balance and silence them only when *the additional people on one side would themselves have a complaint if their need were not taken into account,* given the context. This is one reason why I think it is misleading to describe the balancing argument as a tiebreaking argument (as Thomas Scanlon does), for when we must break a tie, our focus is on the individuals tied, not on how the refusal to use someone else's need or right as a tiebreaker will wrong the tiebreaking individual. (Kamm, 2007, p. 274)

Kamm credited another philosopher's (Temkin) view on this point under the heading *"Helping a few of the neediest greatly or many of them to a lesser degree:"*

...suppose we could [help] one person for ten years or each of ten thousand people for one week. It seems clear that it would be better to do the former, if this is a one-time decision. But, as Larry Temkin (2005) has argued, often allocation decisions are repeated (iterated) and at least some of the same people can be affected in multiple allocations... (Kamm, 2007, p. 275)

The observation from Temkin, in turn, clarified Kamm's view:

...organizations are often in a position to trade-off between helping or burdening a few people a lot, or many people a little. When this occurs such organizations must pay close attention to the nature and possibility of iterations. If an organization can help a few people a lot or many people a little it makes a great difference whether they will face similar choices many times, and also whether it will be the same or different people who are affected each time. If the choice-situation is rare, it may be morally imperative to help a few a lot. Similarly, if the choice-situation is frequent, but different people will be involved each time, it may again be morally imperative to choose on each occasion, so as to help the few a lot, rather than the many a little. But if the choice-situation is frequent enough and the opportunity obtains to help the same large group on each occasion, but it may be imperative to help the large group repeatedly, even if one is only helping the members of that one group a little each time. In such a case one must look at the combined effects of one's actions as a complete set, as in fact one would be helping a large group of people a lot, over time. (Temkin, 2005, p. 225)

Kamm's reference to Temkin is particularly pertinent, as is Temkin's quote, to the emergency managers' decision process. While the original reference is to competing

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groups of potential victims and it would be an applicable dynamic if it were that situation, however, the seriousness of the consideration increases if the one of the groups in apparent danger were the rescue personnel themselves. If there are many "iterations," or repeated use of these finite resources ("few people"), then this would seem to suggest that the rescue personnel would receive the benefit of safety over that of the victim more often inasmuch as the victim can constantly change according to the type of attack; whereas the responders are the same group that is always present. Conversely, if the number of victims is anticipated to be continuously less than the amount of rescue resources available, then the status of whom they ("few people") are can change unless one aggregates the number of victims over time. It is also clear that the number of "iterations" is not defined, and what may be a small number of incidents in a large community might be viewed as an overwhelming series of events in a small one. Regardless, the discussions and observations of philosophers concerning the issue of allocation of resources has a manifest utility in increasing the awareness of homeland security and emergency managers in their decisions involving Considered Risk Casualties.

a.   Issues

For the homeland security decision maker, as seen in the above, the amount of resources available has significant implications to a wide range of operational issues. Indeed, it is the limitation of resources that is the very reason for the existence of a prioritized vaccine distribution planned for pandemics. Similarly, in crisis situations in homeland security, the manager may be required to use prioritization to mitigate the impact of limited response capabilities. The resource distribution decision can be influenced by the urgency of the need, which can be partially addressed by the traditional emergency response methodology of "triage," but that demonstrated example of victim need will not always be the dictating factor. In a terrorism and/or pandemic environment the resource distribution decision must be tempered by the amount of risk that exists for homeland security personnel themselves. Also, the possibility for large numbers of

additional victims in such environments also places the burden on the decision maker to maintain sufficient resources in reserve to address other potential responsibilities, current ongoing conditions, and future expectations.

C. PHILOSOPHY AND THE DUTY TO RESCUE

1. Issue B / Scenario 3

(A circumstance involving decision making by authoritative individuals in homeland security agencies, at any level of government, to expend or not expend emergency personnel and resources to assist and/or rescue individuals trapped in life-threatening situations verses the duty to rescue them.)

The process of "rescue" is at the heart of the issue of Considered Risk Casualties. It is also one of the most complex of decisions in homeland security since there are so many factors that influence the decision. The status of the threat, the level of risk, the number of people to be rescued, the number of available rescuers, the amount and type of equipment available, the type of environment, the amount of time that has passed, the time of day, the age of the victims, the expertise and professional status of the rescuers, etc. are just a small sampling of the dynamics that can be involved in one of these decision situations. Some of these issues will surface again later in this thesis, but an additional one (out of many) that we could choose to speak about, and that arises frequently for the emergency services, is one that Kamm has chosen to provide views about, that of distance. In this case distance means the proximity of the rescuer to the victim(s). She started with an explanation of the Standard View, "The Standard View holds that this is the problem of whether we have a stronger duty to aid strangers who are physically near to us just because they are physically near than we have to aid strangers who are not physically near ... all other things being equal." (Kamm F. M., 2000, p. 655)

She immediately started to notice additional factors that the Standard View failed to observe and she thereby recognized the above mentioned complexity issue:

...if I can help more strangers at a distance or fewer who were near, the difference in numbers might be a reason to help the group of distant people. If the distant people are members of my own community, and the near people are not, I may have a stronger duty to aid the distant. Furthermore, to say that distance matters is not to say that we need do <u>nothing</u> to help distant strangers; nor is it to say that we must do <u>everything</u> to help strangers who are near. There may be an upper limit on how much we must do to aid strangers....

I maintain that the Standard View is not an accurate description of the [problem] and that the Standard Claim – if distance matters morally, we have a stronger duty to aid a near stranger than a far stranger, given their equal need – it is also not correct. (Kamm, 2000, p. 655)

While she may not have agreed, she did start to surface those additional complexities such as: "strangers" verses "own community," and a question of the "upper limit." The term "own community" can apply to many levels of descending rings of association from national to state and local, to local hospital staff, fire department, or fire company. Clearly, "upper limit" is an arbitrary point that strikes a balance between available resources (and the possible wider responsibilities requiring the use of those resources) and the size/value of the immediate objective as compared to the commitment. These are serious and highly consequential considerations for homeland security professionals and for the public in general.

She provided additional considerations with the following: "We must distinguish the possible moral importance of absolute proximity (nearness) from relative proximity and from just any difference in distance. We must also give an operational definition of proximity. (Kamm, 2000, p. 2)

She continued with this theme:

In the [near] case we may be assured that our efforts will be efficacious; in the [far] case, perhaps we cannot be sure that our efforts will pay off...

...it is the point of some contexts to make distance a morally irrelevant feature. So if we are government officials who must aid citizens, the fact that one citizen is near and another is far is irrelevant. The role of government officials and the status of citizens are intended to make some other sorts of considerations (e.g., distance) morally irrelevant. (Kamm, 2000, p. 7)

In this one recognizes additional complications being suggested for the government decision maker, including expected outcomes, and the mandated duty of emergency workers. It should also be remembered that these issues are not independent of each other but are highly interrelated in such a crisis situation, which she began to describe with the following observation:

> Similarly, we may see the difference that distance can make only as we vary the size of the cost required to provide equal aid in a near and a far case, or as we vary the seriousness to an individual of not being aided. It may be that high costs must be born in the near cases but not in far cases….It may be that even less serious problems must be taken care of in near cases but not in far ones. (Kamm, 2000, p. 8)

Kamm's reference to the "size of the cost required" is a major consideration in these types of events. While on the surface cost may in fact be a monetary issue, it is also legitimate to consider the cost as lives, injuries, and the loss of equipment and resources (as a descending level of concerns) for those rescuers who would be dispatched to assist the citizens. Obviously those same factors would need to be considered, as she noted in her reference to "the seriousness to an individual of not being aided."   The judgment concerning seriousness and its relative levels, which are described by Kamm as "less serious problems," points directly to the process of on-scene triage and the timely transmission of that estimation to the decision maker as a pivotal part of a homeland security manager's consideration:

> It is not just equal contexts that is important, but different equal contexts. We could also vary the probability of success of the aid equally in both cases to see, for example, whether we intuitively believe that we are obligated to aid in the Near Case but not in the Far Case when the probability of success is low in both. We could see whether we think we must do as much to make us able to help those who are far as we must do to make us able to help those who are near... (...but we should also make ourselves be able to help) (Kamm, 2000, p. 8)

This observation identified a specific Considered Risk Casualty condition, i.e., "when the probability of success is low in both." This described a choice being made between two separate cases that will in all probability leave one group to their fate, while bringing benefit to the other as result of a conscious decision. This also suggested that

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"be able to help" would mean that the emergency services prepare themselves with all the required personnel training and equipment necessary to do their tasks. It is interesting to note that the principal discussed here would also be applicable in the public health venue with regards the production of vaccine and the existence of a hierarchy of recipients.

Kamm's most pertinent observations for the emergency services when faced with simultaneous or repetitive attacks by terrorists were addressed in what she observed as part of a discussion about *"A Succession of Cases."*

> Then if we aided in one case, what reasons could we give for not-aiding in the next case, and then the one after? But the aggregation of all the aid would consume much of our life. We are not required to give up so much in order to aid, it might be said. So perhaps, it might be said, we are not required to aid in any of these cases. (In real-life cases, aid to those who are far (at least from affluent countries) may involve issues of basic economic justice that should be societal and institutional concerns. This is an additional factor, besides, aggregation, that may be held to account for our refusal to aid in even one case.) (Kamm, 2000, p. 11)

In this one sees that while on the one hand it suggests that if there are in one jurisdiction sufficient personnel and resources as compared to another jurisdiction which may not have sufficient numbers of them, one is obliged to give assistance while that other jurisdiction, with a similar circumstance but without the resources, is not obliged to act as the first one is. It does, however, clearly present the possibility that regardless of capability, and depending upon the "aggregation" of the demands, that the emergency services may not be required to respond at all. While this is not currently a condition that the emergency services would probably honor (and would be directly contrary to their ethos and traditions), Kamm here introduced that as a new factor in the response calculation for the emergency manager to consider. She defined the issue further as follows:

> Even if there is no distinction between the cases taken individually, the cumulative effort or cost is different in aiding one versus many. Even if there is no magic cutoff point such that the difference between aiding ten and aiding eleven, for example, will involve making more of a total effort than is required, we can set an arbitrary cutoff so as to aid some but not to go on aiding when the aggregate total will clearly be more than required.

Furthermore, it is not true that the problem of aggregation only arises where there are potentially many cases needing aid. We can imagine one near accident case that would require many small bits of aid over time, so that we would start off giving a certain amount but, as time went on, more and more would be required to make the rescue a success. We could in this case also set an arbitrary cutoff point so that we do not wind up doing more than we are required to do through the inability to say why, at any point, one small additional bit of aid should make any difference. If we can stop the aggregation in this way in one near case, we could stop it where the potential for providing more aid than is required arises through many cases. Hence, the threat of future obligation need not be a reason for deciding how we act in the first case at the beginning of the potential series. (Kamm, 2000, p. 11)

It must be understood and what is being discussed in these observations is not the abandoning of the victims, but rather the amount of assistance being applied to the rescue effort to include equipment. But what about the issue of distance previously discussed when added to the amount of resources being applied? Again, Kamm addressed that point:

The question in this case is whether, intuitively, if I am not totally efficacious with what is near, I have an obligation, in virtue of being near the victim, to do what I can to activate the tools of rescue that are still far. If I am near the victim with my [valuable rescue tool], which is also near to me, and its destruction would save someone's life, intuitively I have to destroy it. But if I am near the victim, do I have to... transport my far [valuable rescue tool] for destruction if this is necessary? Intuitively, I do not think so" (Kamm, 2000, p. 18)

Thus the rescuer is required to expend the means immediately available, but the calling in of additional resources is not the same type of decision.

At this juncture, Kamm chose to introduce another factor concerning the relationship of the victim to the rescuer, that of "salience." With this, the philosopher introduced what may be the most important factor in Considered Risk Casualty circumstances, which is what the decision maker knows about the conditions of those people in need of rescue at the time he/she is presented with the need to make that

decision, "The salience of need refers not only to the obviousness and inescapability of noticing need, but also to the continuing imposition of this knowledge on us." (Kamm, 2000, p. 20)

It is relatively simple to accept that distance, resources, salience, etc. are all legitimate factors in a rescue effort, but the relationship between and among them and how that might affect the decision-making process is an area that seeks guidance. Kamm addressed that thusly:

> A sign that I intuitively believe that it is nearness that obligates me to help is that once I am near someone who needs help, I do not think I am permitted to move myself from him to a greater distance merely in order to avoid being near. Contrast this with my sense that I am permitted to change the salience ... of need, if no other factor obligates me to provide aid. If I intuitively thought that such salience obligated I would think that I am not permitted to change it to avoid being obligated, as I believe that I am not permitted to change nearness, once it is in place, to farness merely in order to avoid being obligated. (Kamm, 2000, p. 23)

This presents an interesting situation for the rescuer in that on the surface it appears that once one is in proximity to a victim; the rescuer is required to stay with that individual(s) but that the salience or importance of the victim is a variable. Presumably since the victim is in need of rescue and "trapped," the question of distance is entirely under the control of the rescuer. This begs the question, who controls the salience? For example, if during the rescue of one individual, ten are discovered elsewhere, which group is more important? Do their individual conditions translate to salience, or can the rescuer maintain a presence and resources with the single victim while dispatching greater resources to the larger group as recognition of their condition being more salient? Kamm noted the following.

> Obligations do, at least intuitively, seem to vary with the near and non-near in some cases; near things should be salient if this aids us in meeting the obligation that nearness generates. The obligation can be avoided by staying far rather than being near, but it cannot be limited merely by reasoning based on the mutual self interest of the agent and in the stranger. At least, I claim, this is the report of our intuitive judgments. (Kamm, 2000, p. 25)

While one would be hard pressed to imagine emergency service personnel intentionally avoiding gaining proximity to a victim solely to avoid providing assistance, there could be circumstances under which such proximity might be delayed, such as site contamination, barriers that must be overcome, inadequate equipment, etc., but the introduction of self interest is an important consideration. Contamination would certainly be a matter of self-interest, as would approaching suspected suicide bombers, deranged individuals, or those who have positioned themselves in a way to intentionally threaten emergency personnel. Inasmuch as what is being discussed are "victims", these circumstances of approach should be substantially different; however, the issue of self-interest is a valid one.

> In general, it may be that, at least intuitively, costs that (roughly) are upfront to helping someone can defeat obligations, even when the same costs as further effects cannot. If this were true, then we would expect only upfront costs to defeat an obligation to the distant more easily than they would defeat an obligation to the near. Why, it may be asked, is the upfront/downstream distinction morally significant, if the outcome in terms of harm to the agent and the victim would be the same? It represents the difference between what an agent must do and what he will suffer as a result of what he will do. If the distinction matters, presumably it has something to do with how people should be treated, both victim and agent, in bringing about an outcome. One sort of treatment (not paying upfront) is not disrespectful of the victim; another sort of treatment (not doing what is easily done because of downstream payment to come) is disrespectful of the victim...
>
> ...its flipside is that requiring that an agent to do something is disrespectful of the agent, but requiring that he ultimately pay downstream is not. (Kamm, 2000, p. 28)

If injury and death is a "cost" to the rescuer, then it is clear from the above that that situation supersedes obligation, at least until such time as the risk to the rescuer changes to an acceptable level. This also sets up a consideration over when the "cost" is incurred. A homeland security manager is being advised here that committing rescuers to a situation wherein it is recognized "upfront" that they will suffer injuries and death will generate one type of decision, but the likelihood of that happening "downstream" may produce a completely different type of decision. Clearly, there are numerous other

factors such as time, a variable level of threat, amount of other responsibilities, etc. that would be a factor in this thought process. Another issue may well be the nature of the victim; "The strength of the duty may vary with social membership – stronger to one's own society, weaker to other societies (other things being equal) – even if it does not vary with distance, as the individual's duty rescue seems to" (Kamm, 2000, p. 31).

This significantly sets up a hierarchy of obligation, and raises the possibility that rescuing and/or securing the emergency personnel as part of an "own society," changes the duty to rescue. The consequence of this thought has great significance for the homeland security emergency manager in making Considered at Risk Casualty decisions as will follow:

> Having performed a strenuous stringent duty can make it permissible to refuse to do a strenuous supererogatory act or a less stringent duty, if what was involved in the stringent duty depleted the resources also needed for those other acts.... Can having performed one strenuous duty of one type relieve one from performing another of the same type, for example, saving the next person [trapped]? Only if there is a limit to the costs one must incur to perform such duties. Hence it is not merely that one has aided in the past *that is relevant to future action*. Whether one's aid was supererogatory, whether it was a different type of dutiful act, and how costly it was can affect what one must do in the future. (Kamm, 2000, p. 32)

a. Issues

Thus the reader is informed about the aggregate consequence of distance and other factors with regards to the duty to rescue. If the ability to reach a victim is a factor of distance, then the previous issue of resources can have a direct effect on minimizing that, but the reader is also told about the volume of the demand for services and/or those other resources being a combined decision-making factor. The agent is also provided with the concept of there being a limitation on the services rescuers are required to provide due to costs, the potential outcomes, or the burden of additional responsibilities. There are unforgettable examples of the "costs" to emergency service personnel that occurred on September 11, 2001 which, according to the above observations by Kamm indicated that subsequent circumstances that present risks of

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similar possibilities for rescue personnel would permit a decision to preclude their use at all. However, that would contravene the very reason for the existence of emergency services and such a decision, while worthy of consideration in extreme matters, would most probably not be entertained in situations of substantial but lesser risk. It is entirely possible, though; that a form of modified response that reflects the risk to the responders could be considered for homeland security personnel that would concede the cause for such a change and still be acceptable to the public as a whole.

This would naturally mean that civilians and the actual victims, under certain circumstances, would need to rely on their own resources to an extent in times of difficulty. While a changed response pattern in New York City and the Washington, D.C. areas might be understandable to the public, it is less clear that other locations around the country would be as willing to accept such a concept. What the philosopher failed to define is if the "loss" suffered in past experience can inform a present decision. In short, when affecting current levels of performance or commitment, must it be a direct and personal experience, or can the losses on September 11, 2001 be an object lesson for the entire country? This author suspects it is the latter rather than the former. This becomes not only a matter of "salience" or importance of those to be rescued, but also now includes the importance of the rescue personnel themselves.

Thus far in this chapter it has become manifest that the philosophers have provided a plethora of examples and analysis that can have utility outside their discipline. Through a series of increasingly complex additions to her scenarios, Kamm has unequivocally demonstrated that just in the area of the "Duty to Rescue" there are useful examples ranging from the rescuers proximity to a victim to the different responsibilities of responding to the needs of a fellow emergency worker as compared to the average citizen, to foregoing the duty to rescue at all, based on past personal experiences and possibly those of others. These are significant and profound lessons that can only serve to benefit homeland security decision makers in a full range of high-risk situations, but particularly in those that involve Considered Risky Casualty conditions.

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D.   PHILOSOPHY ON "KILLING" AND "LETTING DIE."

1.   Issue C / Scenario 2

(The creation by public health agencies of a prioritized list of vaccine recipients in the event of a pandemic disease, and the distinction between "killing" and "letting die.")

A previous section examined the issue of "distance" in the decision to commit personnel and resources to rescue trapped victims. In the course of that discussion it became obvious that there are multiple other issues that call out for attention before a homeland security official can make an informed decision in such a situation. All of these scenarios being examined have the potential for resulting in Considered Risk Casualties which makes them daunting decisions, but for the sake of this thesis the author will presume that death will occur for a certain number of individuals or victims who find themselves in these situations. Since it can be said that as on September 11, 2001 thousands of people were "killed;" it is reasonable to ask if there is a difference between dying at the hands of terrorists and dying as a result of a decision to not provide rescue in terrorist incidents or at some catastrophic natural hazard. In short, the difference between "killing" and "letting die" in a homeland security context must be discussed.

Death can ensue from a number of direct actions such as bombing of military installations (the intended killing of an enemy) located in a civilian neighborhood (the unintentional death of non-combatants), but it can also occur as a result of the opposite circumstance, i.e., taking no action (letting die). Along this spectrum of possibilities the philosopher presented a number of opportunities for introducing pertinent questions including several about the difference between "killing" and "letting die." While there is no suggestion that the public health policy about the distribution of vaccines in any way equates to "killing," it does suggest, of necessity, the examination of how philosophers view "letting die:"

It seems to matter how we die, not simply that we do ... there are strong constraints, for example, against killing, that limit our right to bring about the greater good, constraints by which we may be required to abide even at great personal cost." (Kamm, 1993, p. 17)

This suggests that an agent's decision making that may lead to loss of life, and the agent needs to be cognizant of what constitutes "killing" before the agent can conclude that an action is appropriate to support a "greater good." It also suggests that "killing" is a consequence of some action created by the agent and that issues surrounding it can be significant. Kamm described certain elements of the difference by noting:

The victim in a letting-die case ... need not have been killed either by the non-saver or by any other person. He could die accidentally or of natural causes. The victim in a killing case... is killed. This difference... has the following significance: Suppose the letting-die case involves a natural or accidental death. Then it is possible that a moral difference between my killing and my letting die may result from the difference between a person's dying a natural rather than a person-caused death, not from a difference between my letting him die and my killing him. (Kamm, 1993, p. 22)

The difference between these two outcomes (killing and letting-die), as can be noted from the above, has a great deal to do with both action and intent on the part of the agent, but it is also significantly impacted by the type of relationship that exists between the agent and the victim:

Once someone else already stands in a saving relationship with [a victim], or [the victim] is independent of my assistance and dependent on no one else, my interference takes from him something he already has. It prevents his having it and continuing into the future as it otherwise would. When I prevent someone from initiating aid to him I do not, in the same way, prevent the continuation of some state that already existed and would continue in the future. It is in the former, not the latter, type of case that we speak of killing. (Kamm, 1993, p. 26)

It is evident from this statement that the establishment of a hierarchy of vaccine distribution, which, if adhered to by health-care workers is not the equivalent of "prevent someone from initiating aid" and is not therefore a "killing," but would come under the latter, i.e., "letting-die." There is an obvious variation though that can easily be imagined

that surrounds the pivotal point of initiating aid and that would be one of stopping aid that is already underway. Nowhere in the vaccine distribution plan is there a discussion of stopping the administration of vaccines, but the distinction between the two events is worthy of a comment since it is the type of understandings that can help inform homeland security personnel in a wider range of Considered Risk Casualty circumstances.

> The view being proposed here about a killing is that, in a killing, the Agent's action is either (i) the original cause of death, whether the victim is dependent or independent of him, or (ii) the removal of a defense from someone independent of him (this includes independent of his defenses). The view being proposed about letting die is that, in letting die, the agent's action is (i) not the original cause of death, but maybe (ii) the removal of a defense the Agent provides from one dependent on him... (Kamm, 1993, p. 30)

a. Issues

In this example, the vaccine distribution plan is neither the "original cause of death," (the disease itself would be the cause), nor is a "defense," (the vaccine) being removed since it has never been issued. The difference between "killing" and "letting die" not only involves the type of "intent" issues previously reviewed in theology, but also the relationship that is established between the rescuer and the victim. Again, there appears to be a matrix of values under consideration here, but that of "intent" remains pivotal. It is recognized that many of these philosophical observations are subtle and nuanced; however, the clarity of the observation is not the goal of this chapter. Rather, the purpose is to make recognition of the fact that this discipline has a depth of knowledge that can as noted above, inform the homeland security practitioner.

2.   Issue C / Scenario 3

(A circumstance involving decision making by authoritative individuals in homeland security agencies, at any level of government, to expend or not expend emergency personnel and resources to assist and/or rescue individuals trapped in life-threatening situations verses. the difference between "killing" and "letting die.")

As might be expected, this is a topic fraught with debate, nuances, and definitions. Kamm again addresses the research on this topic and the "Conceptions of Moral Equivalence" that lie at the core of the difference between the two situations:

> ...what I believe is the implicit traditional view about how killing and letting die can *differ morally per se*. That implicit traditional view is that killing and letting die differ morally only if, other things equal between them, one of the terms has definitional properties that have moral significance (sometimes or always) and those properties are never present in an instance of the other term. (The obvious factor here is creating an original cause of death, which is definitional true of killing.) (Kamm, 1993, p. 33)

Similar to what earlier discussions of PDE, where the pivotal issue was one of intent, Kamm infused the reader with the realization that in this type of instance, the pivotal issue is that of causality, "An example is when someone removes the asbestos cover surrounding a person, so that an approaching fire can consume him. A killer acts to alter a causal chain; a non-saver does not." (Kamm, 1993, p. 22)

She further refined it with the following observations:

> The victim in a case of letting die was already facing a cause of death independent of any that the non-saver produces....In contrast, when a person kills in standard cases by producing an original cause, his victim does not face a cause of death produced independently of the killer...

> Notice that losing *only* life he would have had if the agent had aided is not the same as losing life he would have had *only* if the agent had aided. The former is consistent with several people being able to aid but refusing to do so; the latter is not. A killer may introduce an original cause to someone who is (causally) independent of him, and if death is bad for the person, he introduces an original threat to a person who is independent of him. (Kamm, 1993, p. 23)

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What Kamm pointed out here is that the threat and/or the cause of death is directly introduced by a killer, whereas if any individual who was already facing a cause of death, (for example, an imminent building collapse) and another individual chooses to be a "non-saver," then that individual is not a killer since he did not introduce the cause of death:

> In letting-die cases one refuses to make efforts that would provide life to someone already under threat of death. Efforts made to avoid killing in standard cases are not efforts that would provide someone already under threat of death with continued life. Hence the functions of the efforts refused by the non-saver and by the killer are different. (Kamm, 1993, p. 24)

The "refuses to make efforts" statement can be construed as a description of what was raised as a possibility in the previous section about deciding not to respond to trapped victims and is specifically described as a "letting-die" situation. Having established that point, Kamm went on to provide its properties:

> ...the following properties... are conceptual components of letting die:
>
> ...Letting die does not itself create an original cause or an original threat of death.
>
> ...The victim of letting die faces a cause of death independent of any the nonsaver produces in virtue of non-saving.
>
> ...The victim loses only life he would have had via the agent.
>
> ...Efforts made by the agent could have provided the victim with continued life.
>
> ...The non-saver exercises control over what is his."
>
> (Kamm, 1993, p. 31)

This is not suggesting that individuals involved in homeland security decision making are ever involved in situations of "killing" since that would involve the direct introduction of a cause of death to the victim. Given the fact that the very nature of this scenario (and the others) that an incident capable of causing death has already occurred

demonstrates that emergency and rescue personnel are responding, or for that matter are involved at all, exactly because there is a life threatening circumstance already present. That is to say, that the victim, for all intents and purposes, is already in a situation where he can die unless the rescuer comes to his aid. Once that circumstance is satisfied, absent the rescuer actually introducing a new cause of death, the decision to not give aid or a decision to remove the aid that is under the control of the rescuer and thereby permitting the original cause of death to continue is not a killing but rather letting die.

a.   Issues

While in this section philosophy has provided a number of variables to consider, in essence, the discussion has revolved around the question of "intent" in determining whether a circumstance is one of "killing" or "letting die." It is not foreseeable that a homeland security practitioner would be faced with a decision to "kill," but there are numerous circumstances where there may be an unavoidable condition that results in people being permitted to die. By prominently discussing the factor of "intent," the decision maker can be insulated from the follow-on concerns that generally are contained in the thoughtful questions, "Did I do the right thing, and did I do all I could have done?" In and of itself, that makes this review useful.

There is no need at this juncture to revisit the issues surrounding duty, resources, and amount of effort that distinguish the homeland security rescuer from the average citizen as regards that status's influence on decision making, since it has been discussed previously and will be reviewed again. However, it is useful to note that once these decisions are made, the types of considerations iterated in this section can serve as a method of evaluating the validity of that decision.

E.   PHILOSOPHY AND HARMING SOME, SAVING OTHERS

1.   Issue D / Scenario 1

(Shooting down a hijacked commercial airliner that is being used as a weapon by terrorists to kill many others verses harming some to save others.)

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...if actively causing a death that is not intended, but merely foreseen to be a side affect of the means used to save [others] is not permissible, it would follow that just passing by a dying person on the way to saving [others] should also be impermissible. But this makes it impossible ever to save some rather than others in situations where we cannot save everyone...

The explanation I propose to account for the various permissible and impermissible killings we have so far considered (and others as well) is based on... the Principle of (Im)Permissible Harm (PI/PH):..

It is permissible to cause harm to some in the course of achieving the greater good of saving a greater number of others from comparable harm, if events which produced the greater good are not more intimately causally related to the production of harm than they are to the production of the greater good (or put another way, if events which produced the greater good are at least as intimately causally related to the production of the greater good as they are to the production of lesser harm.) (Kamm F. M., 1989, p. 232)

The corollary to PDE in the above comments is unmistakable in that it shows the harming (or death) of others has legitimacy in relationship to a greater good. The PI/PH also inherits that concept but adds an additional dynamic for the homeland security decision maker to consider, that of the relative intimacy of the causative factor as a balance between the intended good and the amount of harm produced. Clearly, the removal of the threat presented by the use of a commercial aircraft as a weapon in a heavily populated environment must be seen as a "greater good" for the large number of those who would have died in such an attack, in comparison to the "lesser harm" that would befall the smaller number of people on board the plane.

Kamm addressed this point directly in the following:

The PI/PH allows us to introduce new threats as we remove the old ones - a homeostasis of threats - so long as the events which produced the greater good are no more intimately causally related to the lesser harm that the new threat produces than they are to the greater good. For example, an event which removes a direct threat to the greater number may cause a comparable direct threat to the lesser number, but may not itself be the direct threat. (Kamm, 1989, pp. 232, 233)

Thus one can see that the agent is not only permitted to direct situations that result in Considered Risk Casualties, but may also introduce new factors that make that outcome inevitable, rather than merely being passive to the external conditions that created the initial situation. It denotes that the agent has significant latitude in his considerations. It is noted, however, that there are limits on that latitude, as in the need to judge the relationship of the intimate causality to the greater good and the lesser harm, but even in that, the philosopher provided options:

> The PI/PH also permits us to do something to produce a greater good when the greater good itself will produce a lesser harm. In such a case, the greater good *causes* the lesser harm, so there is no need to worry about a cause of the greater good being more intimately related to the harm than to the good. When the lesser harm is a side effect of the greater good, the greater good does not occur *by* way of the lesser harm to others, according to the analysis of 'by' provided by the PI/PH. In these cases what we do, -- or any other event that helps to cause the greater good – is more directly related to the greater good than to the harm, since the greater good either is the direct cause or indirect cause of the lesser harm. (Kamm, 1989, p. 235)

With this observation, one can envision a situation wherein had the ultimate target been known and evacuated by homeland security officials, thereby causing the terrorists to destroy the plane and its passengers without achieving the killing they intended or adding further benefit to their cause, it would likewise have been an alternative acceptable outcome, in short, removing the value of the terrorist's target

Similarly, the actual events onboard the hijacked aircraft that morning, which were initiated by the passengers rather than an external agent, is also addressed by Kamm as an observation in one of her philosophically contrived scenarios.

> So long as what produces the causally useful lesser harm is either the first greater good itself, or a means to this greater good which is at least as intimately related to the greater good as to the lesser harm the fact that the lesser harm is causally necessary to the maintenance of the greater good is not a reason against acting. (Kamm, 1989, p. 241)

This would imply that had an agent decided to contact the passengers on the plane (as their family and friends did) to advise them what had happened elsewhere in the

country that morning and thereby instigating them to respond as they did, would also have been an acceptable set of circumstances.

There is a further list of criteria that the agent can use in making the decisions such as described above, by Kamm's enumerating the following:

> ...components of the PI/PH, which summarize ideas of necessary and sufficient conditions for the permissibility of causing the deaths of nonthreatening innocents in particular cases:
>
> (1)It is acceptable that greater good have lesser harm as one of its aspects or as its direct or indirect effect.
>
> (2) It is permissible that a mere means to a greater good have
>
> (a) lesser harm as an indirect effect, if it has greater good as a direct effect or as an indirect effect achieved by a causal route independent of the lesser harm, or
>
> (b) lesser harm as a direct effect, if it has greater good as a direct effect.
>
> (c) lesser harm as its aspect, if it has greater good as its aspect also...
>
> The greater good and lesser harm should branch off from a common point, though they need not be equidistant from the point, given that it is acceptable that the greater good be *more* intimately related to the cause they both share than the lesser harm is. The PI/PH, therefore, (only) comes close to involving a *principle of symmetry of good and harm.*
>
> To repeat, an event that is causally involved in producing a greater good is permissible if it has no more (it may have less) intimate a causal connection to the lesser harm than it has to the greater good (where it is understood that something that is an aspect of an event is more intimately
>
> connected to it than something that is a direct effect, and something that is a direct effect is more intimately connected to it than something that is an indirect effect.) (Kamm, 1989, p. 242)

While the above criteria are useful, it is important to emphasize the issue of symmetry of good and harm, or more correctly, the lack of symmetry. It is not so much a matter of a balanced ratio between the two as much as it is an issue of intent. This is

reflective of PDE although PI/PH can be seen as less restrictive: "…we concluded that it was permissible to intend that the [passengers] be killed because what we did to remove the [plane] was not more intimately related to the lesser harm than to the greater good" (Kamm, 1989, p. 245).

The key issue for the agent to consider is contained in the word "*intend*." While one is hard pressed to imagine a circumstance where the homeland security agent would "intend" any killing, the PI/PH does consider that possibility. The shooting down of this plane would have been a single act that caused both the greater good and the lesser harm and apparently cannot be differentiated as causally either/or for both of them. Since it is clearly the causative factor for both, then this is then a matter of the intent of the agent, and on the basis of intent alone should be tolerated by both PDE and PI/PH. While the individual agents' moral values would come into play in any such decision, the above at least provides a wide set of parameters within which the agent can operate in crisis situations.

Similarly, at first glance the above criteria may cause one to think that it is possible to establish a distinct calculus or policy for performance in these issues, but Kamm corrected that notion with the following:

> It is important to see that it is the *permission* to kill, not any killing, that eliminates the right not to be killed from the moral system. If the PI/PH is violated many times over, this does not involve our *endorsing* any such violation; though many people may die, we do not say that it was correct that any of them died, which is what an endorsement would involve. Accordingly, the constraining effect of the PI/PH derives not from its resulting in fewer rights violated or from its moral consequences (it does not make rights come to exist as part of moral reality), but from its illumination of truth, leading to our understanding of, and acting in accord with, moral reality. (Kamm, 1989, p. 254)

Thus, rather than searching for a defined list to assist in decision making, the agent is better served by taking on board the concepts contained in all the above as a means of being informed about the range of views available in these events and using them to assist and add to the knowledge gained through experience and his/her own moral standing.

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a. *Issues*

In this section we see the need for the decision maker to be aware of the relationship between elements of greater good and lesser harm when the decision maker brings about those circumstances, and the importance of intent in the causative event. While the decision maker is permitted to introduce factors that change the dynamics of a situation, that individual must be mindful that when alternative factors are introduced to impact outcomes, it is best if one of the objectives is to reduce the level of the lesser harm that will be created.

2.   Issue D / Scenario 2

(The creation by public health agencies of a prioritized list of vaccine recipients in the event of a pandemic disease and the permissibility of harming some to save others.)

This public health issue is not exclusively confined to the matter of scarce vaccines. Taking into account the original premise that this is in fact a matter of Considered Risk Casualties, a number of the observations about S1/D are also fully applicable here. This is particularly true of the PI/PH considerations and observations because in both cases there is a greater good objective resulting in a lesser harm. However, there are certain nuances that make the situation different that should be noted: "It seems that stopping a threat from reaching people does not ... involve as intimate a relation to the good of their being saved as moving them to safety." (Kamm, 1989, p. 236)

This observation can encompass the population as a whole and could be viewed as the need to consider the use of quarantine and/or vaccinating the entire population as an adjunct to, or a substitute for, the distribution plan. However, that is not the condition of the scenario. The scenario takes the scarcity of the vaccine to be a given.

Kamm further noted:

PI/PH... allows that a lesser harm to be an indirect effect of the means which directly produces a greater good, e.g., the [decision] which moves [the threat] may

cause death by [another means]. This alternative principle, in essence, requires that one have a more intimate relation to the greater good than to the lesser evil. (Kamm, 1989, p. 249)

In other words, this reveals that those who may die due to rationing are essentially having "their" share of the vaccine redistributed in order to supply the greater good, which as the objective of the plan, is the more "intimate relation" required by PI/PH. The sensitivity of this relationship is not lost on PI/PH adherents by Kamm:

PI/PH is essentially concerned with preventing the agent from violating appropriate relations between moral equals, some of whom will be victims and others beneficiaries in the choice of who will live and who will die. This concern is part of a wider concern about how the qualities of being a person limit what it is permissible to do to victims. The PI/PH is thus what I would call "victim-focused," concerned that victims be treated appropriately relative to beneficiaries, and simply in their own right. By contrast, the objections to [taking actions] which directly saves and harms, I believe, are founded more directly on concern for the agent. These concerns are what I would call "agent-focused."

One way to express the agent-focused concern is to say agents must not do harm ... though they may sometimes bring about harm... (Kamm, 1989, p. 250)

In this, Kamm introduced another aspect that the public is uninformed of by public-health of the rights of the individual as part of and consideration in the decision-making process and, again, the issues of balance between the greater good and the lesser harm as well as its application in real circumstances. Such observations can bolster the experience levels of homeland security managers in times of life threatening crisis.

a. Issues

The above sections revealed that there is no metric that can be used in Considered Risk Casualty circumstances. While it is clear that harm can come from a good action such as establishing a hierarchy of vaccine distribution or the terminating of

a terrorist threat, the dynamic of "intent" on the part of the decision maker is again a driving force. Since few homeland security practitioners have the ability to end a terrorist threat and in natural disasters, even less, it is clear that the agent has an alternative through the removal of the victim and/or target among other opportunities and means, to reduce the impact of the harm. This section has initiated an awareness of the experience based self-reliance that is required of a decision maker.

F. PHILOSOPHY AND HARMING VERSES NOT AIDING

1. Issue E / Scenario 2

(The creation by public health agencies of a prioritized list of vaccine recipients in the event of a pandemic disease, and if it relates to the difference between harming verses not aiding.)

As seen from the preceding, there are multiple dynamics and issues that can be elements of a decision to control the distribution of vaccine in a life-threatening situation. One of those questions would naturally be if the public health decision to control the distribution of medication is in fact, harming some people, or is it just a matter of not aiding them?

To consider the question properly as an example of influences on decision making, it is important to realize that public health officials are not actually declining to aid anyone, but are only establishing the sequential protocol through which that aid will be eventually provided to all. However, the time period over which this protocol would naturally extend inherently suggests that some people will be put into a situation whose consequences could be identical to that of not being aided in fact, which could result in a direct harm to them although such a situation was never intended. It is worth saying that it is in that area of unintended outcomes that the decision maker must give consideration. It is therefore beneficial to examine whether or not there is a corollary between harming and not aiding and/or the circumstances under which they differentiate. "...it is not ordinarily permissible to take from someone what he is entitled to in order to prevent a

loss to oneself of that to which one is entitled (For example, I cannot take someone's property to compensate for a theft of my property.)" (Kamm, 1998, p. 472).

The distinctions for the vaccine decision maker in the above observation are that the distribution plan does not (a) "take from" individuals who already have the medication, (b) there has not been a suggestion that individuals are "entitled" to a vaccine, and (c) public health does not experience a "loss to oneself" because of the

distribution plan. Nevertheless, the above quote from Kamm did start to establish some of the moral underpinnings and that would need to have been considered in developing a plan protocol.

Should the decision maker also evaluate whether the individual who is not given a priority position on the distribution list is actually suffering a loss or is merely in a "no gain" condition? Presumably, the individual is part of one of the sub-groups that will eventually receive their allocation of vaccine. While different schools of philosophy propose theories about these issues, Kamm addressed them directly:

> Is [one schools'] theory's loss-versus-no-again distinction the same as [another schools'] harm-versus-not-aid distinction? I believe that the two are not the same and that the loss-versus-no-gain distinction does not explain the harm-versus-not-aid distinction. I have already noted that imposed loss is different from loss in that imposed no-gain is different from no-gain…First, the harm-versus-not-aid distinction is about what the agent does or doesn't do (as well as what the victim undergoes), and the loss-versus-no-gain distinction is only about what the victim undergoes. Second, given the way [the first school] theory describes a loss; it is possible for one to suffer a loss as a result of someone's not aiding. For example, according to [the first school] theory, if one frames facts in a case so that the baseline state of someone is alive and well, then if we do not take action to save him from an upcoming threat (as in one of the Asian flu cases), there will be a loss of life…

> If [the first school] theory emphasizes that the crucial distinction is between suffering losses and not getting gains, it should predict that people would be as disturbed at our not preventing someone from loosing life as at our causing him a loss by killing him. This is just what the thesis of the moral distinction between harming and not aiding denies. The thesis claims that losses caused by an agent's act will often violate negative rights and that this is morally of a different quality than failing to

help someone avoid what is identified as a loss. The harming-versus-not-aiding distinction is often present in cases in which there is a distinction between someone loosing what he would have continued to have [life] independently of our help (when we harm) and his losing what he would not have continued to have [life] independently of our help. (Kamm, 1998, p. 473)

It is interesting to note that the philosopher directly addresses this discussion to matters of public health (Asian flu cases) which is a direct scenario. As seen from the above, the distinction of "imposing" on the agent can mean the level of dependency of the individual who is ultimately the victim, and both are pertinent factors in decision making. It is unknowable from the available literature about the establishment of the vaccine distribution plan how many, or to what extent, these factors influenced the establishment of the described hierarchy. It is, however, worthy of note for the homeland security decision maker to realize that determining and understanding nuances contained in a problem may be the pivotal factors in judging if there actually is a problem for the decision maker or none at all. The discipline of the philosopher which continuously requires nuanced issues in both determining the core of a problem and the most appropriate solution for it, can serve as a guide and be a critical educational experience for those who are charged with managing critical circumstances in real-life conditions.

a. Issues

In this section the reader sees a relationship with factors in the earlier section concerning "killing verses. letting die." However, what can be understood from this section is that there is a relationship of dependency between the rescuer and the victim that either commits or insulates the homeland security practitioner from taking certain actions. For some of those practitioners the concept that under certain circumstances "not aiding" is a viable consideration may be both an original and useful thought as opposed to that of suspending an effort after it has been started.

G. PHILOSOPHICAL ISSUES SUMMARY

Through the above comparison of five abstract philosophical observations among three homeland security type activities involving Considered Risk Casualty potential, it

is manifest that the abstract principles discussed have applicability across a range of homeland security scenarios. A summary review of the decision issues that that these observations can serve to inform are as follows:

Past and current "need" for assistance and the "urgency" of that need can have pertinence in the decision process, but methodologies for intended outcomes must also be considered in decision making. In short, the decision maker has a responsibility to judge the current state of conditions but must also know and define the end-state desired to ensure that the means necessary to result in that outcome exist and are properly applied.

The decision maker must also be mindful of the amount and type of resources that will be expended in a Considered Risk Casualty effort and see to it that the resources are being applied on a judicious and prioritized basis according to current and future requirements.

Such additional factors as the distance/difficulty to reach a victim, the "costs" involved, and the knowledge gained through past experiences in providing assistance can aggregate to the point of outweighing such traditional concepts as the "duty" to act. This can be a significant departure from the traditions of many homeland security agencies and from citizen expectations. A decision to not provide aid or assistance to individuals, who subsequently die, does not routinely mean that the decision maker has "killed" those people but, rather, has permitted them to die, which is a very different circumstance generally pivoting around a question of the decision makers "intent" towards those people.

Through the above reviews, one comes to understand that for decision makers there exists an important issue of their personal, moral sensibilities in these matters. Unfortunately, there is no formulaic solution for these solutions, but they can be largely based not only on the decision maker's knowledge and integrity, but also on alternative choices that may be available at the time of the decision. Part of those alternatives could depend on the level of relationship that exists between the decision maker, the available resources, and the victim.

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VI.   CONSIDERED RISK CASUALTY INCIDENTS

This thesis has reviewed the thoughts and observations of a number of different disciplines concerning the types of events that can be broadly associated with the concept of Considered Risk Casualties. With the exceptions of the discussion of the CDC pandemic vaccine distribution plan which demonstrates that the field of bioethics can be directly related to a planning process, and the discussion of decision making within a military context, both of which have a direct connection to Considered Risk Casualties, the principles that have been discussed remain within the realm of academic context and intellectual thought.

It is possible to add additional disciplines to those that have been reviewed and that are concerned regularly with life and death situations. For example, the practice of medicine and the law enforcement profession both have these types of events occur on a daily basis. They were not included in this review, however, due to the fact that each has long-standing and well-defined parameters within which their practitioners make life-and-death decisions. Legal requirements, administrative controls, professional standards, and extensive education and training all serve to define, limit, and guide the professionals in those two fields when making such decisions during life and death conditions. In effect, such established strictures may actually diminish the range of factors considered in decision making through disallowing of an action or actions that may have otherwise been contemplated and led to a need for an original or independent decision.

In homeland security circumstances, however, there are limitless opportunities for situations to arise that do not have any codified process for determining the limits of tolerance or permissibility for loss of life. Decision makers finding themselves in such circumstances, often in moments of great crisis and stress, must rely on their own personal resources to make decisions that will result in both professional changes, and in many cases, life-changing events for them personally.

With scant effort, it is possible to visualize how the previously presented concepts could have utility in a homeland security setting, particularly as regards the decision-making process that homeland security executives at all levels of government can encounter in managing a wide array of crises. The range and scale of these crises could vary; they could be terrorist-related, or also within the type of accidents and naturally occurring events that are included in the concept of "all hazards." They could include a circumstance involving a single individual caught in a burning vehicle to that of thousands of people engulfed in a toxic gas plume, to a naturally occurring flood or earthquake. In all these events, the common denominator can be the requirement for a decision to be made that may result in casualties. Typically, the individuals who must make these decisions do not have the benefit of a practiced set of strictures, as do the above mentioned medical and law enforcement professions, to aid them in finding a solution for their immediate crisis. It is unfortunately and frequently true that the most critical and seemingly chaotic moments where many life and death decisions need to be made are in the conditions that the first arriving emergency response personnel are presented with. The personnel available at that moment are not always those in senior positions who have the requisite experience to address complex life and death decisions.

It is always possible that any such event can grow and magnify to become increasingly more difficult to manage over time. That time however might also allow for more experienced individuals to arrive at the crisis and accept the burden of decision making. The review of three such examples follows.

This thesis describes three chosen incidents that have been described by the decision makers themselves who had to address the crisis circumstance that had been presented to them. While each of these scenarios has the common denominator of being a Considered Risk Casualty condition and requiring the necessary life and death decisions, they each have different dynamics associated with them. Whether it is a matter of scale, type of threat, resources, time, or the myriad of other circumstances that were present, it is safe to say that the decisions present object lessons for other decision makers and for those who think about such matters in the abstract. This thesis has already revealed that there is a connection between abstract observations and real-life examples.

It is now time to discuss actual incidents of Considered Risk Casualties that have occurred in order to examine the decision-making process contained in those incidents. By continuing to tie the observations of the other disciplines to the actual operational requirements of homeland security decision makers it becomes abundantly clear that gaining the knowledge and experience in both the other disciplines and homeland security can be mutually beneficial to both.

The three events that will be reviewed are all situations found in the fire service. Clearly, as noted above, there are a number of other professions that have had, and do have incidents requiring life and death decisions that would be worthy of review also. However, the absence of examples from other professions is in no way an oversight nor is it a slight to them. Just as in previous chapters where the differences between disciplines or even differences within disciplines were not presented, a similar condition exists here. This thesis is not about the debates within, or between particular disciplines or a comparison of all possibilities. The purpose of the scenarios presented here is to use them as demonstrative examples of the corollaries that can exist between the concepts contained in the other disciplines and homeland security conditions.

What is particularly worthy of note is that none of the decision makers being described below had any knowledge of the existence of the principles or observations contained in the previous thesis sections at the time they made their decisions. That is not to say that these fire service professionals were devoid of the value structures that are derived from the previously observed principles; far from it. It is to say, however, that they had no formal education in the problems, principles, or solutions that have already been examined in this thesis.

Each of the following examples will be summarized to convey the essential conditions that created the life-threatening situation presented, and to focus on the decision-making factors that needed to be considered. It would be impossible to sufficiently convey and include the pressures and emotions that weighed on the individual decision maker being described, but unquestionably, that must be seen as a dynamic that needed to be addressed at the time on both a professional and a personal level.

Following each summary below and the decision factors involved, a selection of various categories of observations from some of the disciplines reviewed in previous thesis chapters will be presented in order to demonstrate their nexus to the actual crisis conditions encountered and the decisions that were made. Following each observation, a list of numbered analysis of the relationship between the observations and the conditions at the scene of the scenario will be included. Key words or phrases noted from the other disciplines will be repeated within the analysis description to highlight the direct corollary between the observation, the condition, and the decisions that were made. Through this means, the abstract observations of the other disciplines will be directly combined with actual occurrences and the specific decision factors that were considered at the time in order to demonstrate the mutually beneficial nexus between the collected body of knowledge in other disciplines and the Considered Risk Casualty conditions facing the homeland security decision makers.

A.   CONSIDERED RISK CASUALTY EVENT A

There's something wrong here.

Chief Vincent Dunn[8]

Vincent Dunn spent 42 years in the New York City Fire Department, retiring as a Deputy Chief. He is a nationally and internationally recognized author and expert in fire ground tactics and operations and command and control of fires. Among the assignments he had during his career was that of chief of the fire department's division that included midtown Manhattan.

Upon arriving at a significant fire in a two-story commercial building in Manhattan, the chief found several fire companies actively engaged in advancing on the fire from both the front and back of the building. Ladders had been placed against the

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[8] Vincent Dunn is a retired Deputy Chief of the New York City Fire Department. He is the author of "Command and Control of Fires and Emergencies" and is a nationally and internationally recognized expert in fireground tactics and operations, and building collapse. Chief Dunn was an expert witness before the 9/11 Commission and has provided commentary to the national media.

building and firefighters were climbing them to gain access onto the roof. The chief noticed the presence of a large number of police officers surrounding the building wearing bulletproof vests, helmets, and carrying shields and shoulder weapons, and saw a shooting victim being removed from the building. The chief questioned the police officer in charge about these circumstances and was informed that an armed individual had taken a number of hostages in the building and had already killed at least one of them. The chief entered the building that was approximately 75 by 100 feet in size to determine the fire conditions and to receive reports of firefighting progress from the fire officers and personnel already engaged in the firefighting effort. Another chief on the scene told him that they were going to force open a cellar door and move a hose line into the fire from there.

Upon hearing that, he had what he described as an "ah-ha moment." He told himself "There's something wrong here." On leaving the building he again took notice of the police presence.

What was wrong was that he realized his personnel were operating within a potentially active field of gunfire where there had already been shots fired and people injured. The shooting could commence again at any moment with his firefighters caught in the field of gunfire between the gunman and the police. He immediately ordered fire department personnel to withdraw from the building and to cease internal firefighting operations, although he did order that hose lines continue to direct water onto the building from external aerial ladders at a safe distance. He further instructed that additional fire companies respond to the scene to be available to address any situation created by an expanded fire, resulting, therefore, in a more difficult rescue condition, should the situation with the gunman eventually be brought under control.

Under normal conditions the saving of lives, the extinguishing of the fire, and the protection of property would be the chief's primary duties and responsibilities. This was a type of environment that the fire department had operated in previously during periods of civil unrest, and the chief recognized the similarities with his current situation. However, under the unusual life threatening circumstances that existed, Chief Dunn decided that his personnel were under a serious threat from the gunman and that the

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saving of their lives was a primary responsibility for him. He had no ability to control, or even impact, the hostage situation, but by withdrawing the firefighters, he was securing the lives that he could save.

The external hose streams could have some effect on the fire, but without his firefighters actually being inside the structure there would be no search for the hostages. Eventually the external hose lines extinguished the fire in what remained of the building, and during that time there had been no additional shooting or police action. Once the fire was out, the police entered the building and determined that the gunmen had committed suicide at some unknown point during the hostage situation. The firefighters then entered the building and in doing a search found seven people in the basement who had died from the effects of the fire (V. Dunn, personal communication, 26 June, 2008).

Some of the factors that one can recognize in making the decision to have the firefighters exit the building were as follows:

a)   There existed a threat to the lives of the firefighters created by the potential for gunfire.

b)   The continuing fire operations could bring the firefighters in proximity to the gunman.

c)   The police department, which otherwise would have been able to affect a rescue of the hostages, was unable to do so due to the fire.

d)   There was a demonstrated threat to the firefighters presented by the gunman's willingness to shoot and kill others.

There are issues in this scenario that demonstrate the following observations or principles from philosophy and theology:

1.   The duty to rescue.

2.   Harming some to save others.

3.   Killing as opposed to letting die.

4.   A good action having a bad consequence (the Principle of Double Effect).

1. Philosophy

a. The Duty to Rescue

Clearly, the fire department members had commenced their rescue attempts prior to Chief Dunn's arrival at the scene as evidenced by the firefighting efforts that were already underway. Although the spatial distance between them and the people to be rescued was not great, the temporal distance established by the fire conditions and the threat represented by the gunman superseded the spatial distance. Due to the threat from the gunman, as well as the fire, it was highly doubtful that the firefighters would have been able to successfully reach the people in the building. The people in the building were part of a wider group of citizens that the fire department had a duty to protect, but they were not part of the fire department "community" itself. Not only was the equipment to rescue those in the building from the fire being utilized already, but additional equipment and resources were brought in from a further distance to be used in a subsequent rescue attempt.

The scenario represents an unusual rescue condition in that the chief found a situation on arrival that clearly demonstrated that the fire personnel were also in need of rescue. The threat was from the condition that existed (the gunman), which would not have been mitigated by the distance between the firefighters and the gunman, since the ability of the bullets to collapse the spatial and temporal aspects of the threat placed them in an immediate life-threatening situation.

Granted, under normal circumstances there would have been a duty to rescue the people in the building, but with the existing types of threats, gaining access to them in the presence of the gunman would have been a "superogatory" effort and an immediate or possibly "downstream cost" to the firefighters that went beyond the expectations or requirements of duty.

There are multiple philosophical observations and comments that have an influence or direct nexus to the above summary as regards the duty to rescue:

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a) We must distinguish the possible moral importance of absolute proximity (nearness) from relative proximity and from just any difference in distance. We must also give an operational definition of proximity. (Kamm, 2000, p. 2)

1.) The chief had a duty to commit personnel and resources to both fighting the fire, and if possible, to rescue the civilians trapped in the fire. In this case, those individuals were also hostages of a gunman, which presented a barrier greater than physical distance. The relationship between the duty to rescue and the proximity of the victim is also understood to mean that distance is not only measured by proximity but by the time it would take to reach a victim. Due to the barrier presented by the gunman, the chief understood that there was no legitimate "proximity" evaluation to consider.

b) But perhaps nearness is then mostly a function of the length of time it takes to traverse a physical distance. (Kamm, 2000, p. 15)

2.) The conditions faced by the firefighters in the building, i.e., the threat from the gunman, effectively placed the time/distance factor under the gunman's control or potentially under that of the police to remove the threat, but, in either event, "nearness" was not a factor the chief was in a position to control.

c) In... [the firefighter's case], we may be assured that our efforts will be efficacious; in the [people in the building's case], perhaps we cannot be sure that our efforts will pay off. (Kamm, 2000, p. 5)

3). The chief had the responsibility to extinguish the fire and also to maintain the safety of his firefighting personnel. By ending the presence of the firefighters in the building, he was certain that his efforts in their behalf were "efficacious," whereas continuing to commit more personnel to the building would not have provided that assurance due to the presence of the gunman.

d) For when costs to reach or to aid people are high and people with whom one is not interdependent ("strangers") are involved (even when all other factors are equal), we may have a duty to pay the costs only for those who are near. (Kamm, 2000, p. 9)

4. The chief realized that the "costs to reach or to aid people" in this event would have potentially included injury and possibly death to the firefighters, not only from the fire, but, more specifically, from the gunman. Therefore, the people ("strangers") were not practically "near," thereby dissipating the requirements of "duty."

> **e)** The strength of the duty may vary with social membership – stronger to one's own society, weaker to other societies (other things equal) – even if it does not vary with distance, as the individual's duty of rescue seems to.) (Kamm, 2000, p. 31)

5. Considering the chief's responsibility to protect and save the lives of the firefighters, who were "near" in the sense that he could affect their outcome, but had no means to directly affect the hostages, it could therefore be expected that he would focus his life saving efforts on his "own society."

> **f)** Even if there is no distinction between the cases taken individually, the cumulative effort or cost is different in aiding one versus many. Even if there is no magic cutoff point such that the difference between aiding ten and aiding eleven, for example, will involve making more of a total effort than is required, we can set an arbitrary cut off so as to aid some but not to go on aiding when the aggregate total will clearly be more than required. (Kamm, 2000, p. 11)

6. The chief could have continued to commit additional firefighters to the firefighting and rescue efforts. However, he recognized that the "aggregate total" cost involved could include the injury or death of firefighters (since there had already been a hostage killed), thus he established a "cut off" point for the ongoing situation and ended the effort in order to "aid" the firefighters.

> **g)** Having performed a strenuous stringent duty can make it permissible to refuse to do a strenuous superogatory act or any less stringent duty, if what was involved in the stringent duty depleted the resources also needed for those other acts. (Kamm, 2000, p. 32)

7. The firefighter's initial firefighting and rescue efforts, in the face of an armed gunman, could be considered a "superogatory act." There was no requirement to potentially "deplete" the personnel resources that would have been required to continue such acts.

b. *Harming Some to Save Others*

In this scenario there were two groups that needed to be saved: the people in the building and the firefighters; and both groups were under the same pair of threats: the fire and the gunman. While the chief had the means to reduce one of the threats (the fire) to both groups, he had no means of reducing the other threat (the gunman). In fact, to continue to reduce the threat he could address (fire), he would have created a situation of automatically increasing the other threat (the gunman), certainly to one group (the firefighters) if not to both groups simultaneously. In order to save the "others," in this case the firefighters, he had to permit the remaining harms (fire and gunman) to continue for the people in the building. By removing the firefighters, the fire would have had an opportunity to expand, but the chief did not "intend" the harm to the people. While one of those harms (fire) would have been that which duty would have required that he address, there was not an expectation that he place his firefighters in a position of any type of threat that they were not normally expected to endure. In fact, to have caused them to enter into any situation where the threat to them from the gunman would have increased could have created an issue of additional moral responsibility for the chief in and of itself.

The philosopher's observations that specifically relate to the type of events represented in this situation are:

> **a)** Even if there is no distinction between the cases taken individually, the cumulative effort or cost is different in aiding one versus many. Even if there is no magic cutoff point such that the difference between aiding ten and aiding eleven, for example will involve making more of a total effort than is required, we can set an arbitrary cut off so as to aid some but not to go on aiding when the aggregate total will clearly be more than required. (Kamm, 1989, pp. 11, 12)

1. While the firefighters had any necessary resources available to rescue trapped individuals in a normal fire situation, the threat posed by the gunman at the scene did not make this a "normal" condition. Continuing to extinguish the fire, and thereby come closer to the hostages, also would have also brought the firefighters closer to the gunman, which would have potentially increased the "cost" to the firefighters to an

unacceptable level or "more of a total effort than is required." The chief, therefore, set a "cut off" point and gave aid to the firefighters rather than others.

> **b)** It is permissible to cause harm to someone in the course of achieving the greater good of saving a greater number of others from comparable harm, if events which produce the greater good are not more intimately causally related to the production of harm than they are to the production of the greater good (or put another way, if events which produced the greater good are at least as intimately causally related to the production of the greater good as they are to the production of the lesser harm.) (Kamm, 1989, p. 232)

2. By ordering an end to the firefighting operation, the chief redirected the life threatening condition created by the gunman away from the firefighters through which he created a direct and good *"causal relationship"* to them. The harm that had been present with the hostages had already occurred, and the chief's decision to evacuate the building, therefore, did not have more an intimate relationship to the harm that continued than it did to the good that came to the firefighters.

> **c)** ... an event which removes a direct threat to the greater number may cause a comparable direct threat to the lesser number, but may not in itself be a direct threat… in [this case] therefore, the [redirecting of the threat], our means to the greater good, has at least as intimate a causal relation to the greater good [firefighters saved] as to the lesser harm [building occupants dead]....The conclusion is that the redirection [in this case the removal of the firefighters from the gunman threat] is permissible. (Kamm, 1989, p. 233)

3. The chief did not cause any of the deaths that occurred. The cause of death was the fire itself and the gunman's decision to hold them hostage in the fire building. At the time he made his decision, the hostages were already under a threat to their lives from the gunman. His decision to save the lives of the firefighters foresaw the condition under which they could have been injured or killed, and therefore he made the decision to secure their safety

> **d)** The PI/PH also permits us to do something to produce a greater good when the greater good in itself will produce a lesser harm. In such a case, the greater good **causes** the lesser harm so there is no need to worry about the cause of the greater good being more intimately related to the harm than to the good. When the lesser harm is a side effect of the greater good,

the, greater good does not occur **by** way of the lesser harm to others according to the analysis of "by" provided by the PI/PH . In these cases what we do, -- or any other event that helps to cause the greater good – is more directly related to the greater good than to harm, since the greater good either is the direct cause or the indirect cause of the lesser harm. (Kamm, 1989, p. 235)

4. In this instance, the hostages were faced with parallel threats, the first was from the gunman and the second was from the fire. The chief acted to remove his firefighters from the gunman's threat ("a greater good"), which then permitted the fire to expand ("a lesser harm"). Thus, the greater good resulted in being an indirect cause of the lesser harm rather than the inverse; and, therefore, the firefighters were not advantaged at the expense of the hostages.

c. *"Killing" verses "Letting Die"*

Those in the building were already under multiple life threatening risks at the time when the chief first arrived. Those risks were the possibility of being killed by the gunman (a civilian had already been) and from the fire conditions. Neither of these threats had been created by the chief nor any of the rescue personnel present. The "imposition" (the need to be rescued) by the people upon the firefighters represents that they had what they had (life) only through the continuing efforts of the firefighters to reach them. The chief's decision to remove the means (the rescue effort) from them to maintain what they only would have had because of those efforts (life) is a clear example of the philosophical description of "letting die" since the firefighters did not introduce the direct cause of death (the fire). In this example, it is made even more obvious by the fact that there was a second completely independent life threatening situation (a gunman) that was functioning independently of the chief's decision or the firefighters' actions.

The pertinent philosopher's quotes are as follows:

a) The size of the effort that must be made rather than kill or let die should be equally great or small. Not killing often requires no effort. Saving a life, however, usually requires some action, and hence effort. (Kamm, 1993, p. 18)

1. While there is absolutely no suggestion being made that the emergency services were in any way involved in the "killing" of the hostages (the gunman was the force that retained them in the building and exposed them to the effects of the fire), the chief made a decision and took action that precluded his firefighters being caught in a situation for them of "letting die." He could have continued to permit them to operate under threat from the gunman without any additional effort on his part to change the operation, but that in all probability would have changed the circumstance and resulted in a firefighter's death.

> **b)** The victim in a letting-die case... need not have been killed either by the non-saver or by any other person. He could die accidentally or of natural causes. The victim in a killing case... is killed. (Kamm, 1993, p. 22)

2. The victims (the hostages) did not die because of the decisions of the emergency services ("the non-saver") since the threat posed by the gunman was the factor that prevented them from leaving the building, and conversely, also kept any rescuers from entering. It was the bad intention of the gunman that led directly to the causative factor for their death, and, therefore, they were killed by the gunman rather than by any other individuals at the scene.

> **c)** The victim in a case of letting die was already facing a cause of death independent of any that the non-saver produces. (Kamm, 1993, p. 23)

3. The threat to the lives of the hostages preceded the existence of the fire which, once started, became a second source of threat to them. The chief's decision to withdraw the firefighters from the building came subsequent to the existence of both life threatening conditions, and was therefore "independent" of the chief's order. In that sense, they could be thought of as in a "letting die" condition with regards to the fire, but they were in fact "killed" by the actions of the gunman.

> **d)** In letting-die cases one refuses to make efforts that would provide life to someone already under threat of death. Efforts made to avoid killing in standard cases are not efforts that would provide someone already under threat of death with continued life. Hence the functions of the efforts refused by the non-saver and by the killer are different. (Kamm, 1993, p. 24)

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4. The chief's decision was one of protecting the lives of his firefighters rather than one directly related to the safety of the hostages, who were already "under threat of death," because the chief had no means to overcome the gunmen's threat. On the other hand, the killer's "efforts" were designed to keep the hostages in the building and is therefore directly related to their being killed.

> **e)** Essentially, removing a defense against a potential cause of death – this could be a cause that had at one time already threatened the person or something entirely new – is a killing if the person who dies was not dependent for the defense on the person who terminates it. If an agent terminates aid and so allows a potential cause of death actually to kill someone, but it is aid that the agent himself was providing, or aid that belongs to the agent then we have a letting die. (Kamm, 1993, p. 28)

5. The hostages died from the effects of the fire; they were entirely dependent upon the fire department for their "defense" against it. Thus, when that defense was removed, under normal circumstances, it would have been a case of "letting die." However, in this instance the overriding and preceding threat to their life came from the gunman, and it was his holding them as hostages in a burning building that eventually led to their death. Therefore, they were killed by the gunman, rather than permitted to die by the firefighters.

2.   **Theology**

a.   The Principle of Double Effect

The chief originally had a good intention, to put out the fire and thereby save the people in the building. However, the second threat from the gunman was more immediate and uncontrollable, and, therefore, it needed to be addressed. Withdrawing the firefighters from the building in order to protect their lives from the gunman was an action with good intent, but there was an unintended bad effect in that the people in the building were subsequently found to have died from the effects of the fire. It should be noted that the location of the people in the building was unknown as was whether or not they were still alive at the time that the evacuation order to the firefighters was given.

Regardless, the continuation of external water streams represented a second good intent on the part of the chief to contain the fire threat as best as the conditions would permit.

<u>The theologian addresses such a condition thusly:</u>

a) ...one also causes something non-intentionally when, in doing something else, one foresees and permits it as a side effect, which one does not cause properly and directly.... One chooses as a means something in one's power – some performance or omission – thought more or less likely to bring about the intended end. But it also is more or less clearly foreseen that, either possibly or surely, the performance or omission will have various good or bad consequences distinct from its intended end, and in making the choice these good or bad consequences are accepted, gladly or reluctantly as the case may be, as side effects. (Grisez, 1993, p. 471)

1. The chief used his authority ("power") to remove his firefighters from the building in order to save their lives ("the intended end") which allowed ("bad consequences distinct from its intended end"), the expansion of the fire that contributed to the death of the hostages. Theologically this would be "...accepted... as side effects."

b) Sometimes, too, the very same sort of performance or omission could belong to two acts that could cause another's death, but which have very different moral significance, depending on what choice of performance or omission executes, that is, depending on whether the death is chosen as a means or only accepted as a side effect of choosing something else. (Grisez, 1993, p. 471)

2. The chief made a decision intended to save the lives of the firefighters, the subsequent death of the hostages was a "side effect of choosing something else."

c)...if one knowingly brings about someone's death as a side effect, one is not responsible for intentional killing if one neither wants the death nor chooses to kill. (Grisez, 1993, p. 482)

3. As noted above, there was never any intention or act of killing on the part of the emergency services, and nor did they want nor choose for the hostages to die.

d) In many cases, one's own life cannot be sacrificed without unfairness to others, such as dependents, or detriment to the common good. (Grisez, 1993, p. 484)

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4. The firefighters, who were involved in this event, including the chief, had a responsibility and duty to also protect the wider community. The chief's decision to protect the lives of the firefighters was therefore also supporting the "common good."

e) ...I think this allocation of resources is a real factor in what we're talking about…I mean, should we spend millions and millions of dollars to keep someone alive?...I would say no. You made your point when you say this has become prohibitive and so we stop…I would say you could come to the conclusion that we really cannot accomplish our intended goal so there's no point in having people go into a situation where their life could be thrown away (V. Genovesi, personall communication, 9 July, 2008)

5. Naturally, the chief's intention was to extinguish the fire in the building; however, due to the threat posed by the gunmen he could not "accomplish our intended goal," and continuing the presence of the firefighters in that building could have resulted in their lives being "thrown away."

As can be seen from the above, the observations and comments in the abstract and from both philosophy and theology, multiple aspects of the conditions surrounding the death of individuals, particularly that of "intent" and the "casual" relationship to the deaths, can be directly associated with actual occurrences in homeland security scenarios. Such observations could have benefited the chief in his decision-making analysis.

B.   CONSIDERED RISK CASUALTY EVENT B

That's it. That's it. No more.

Chief Michael McNamee

Michael McNamee is a District Fire Chief with the Worcester, Massachusetts Fire Department. He has thirty-six years of experience in the department, and he was the chief on duty on the night of December 3, 1999.

At 6:13 pm the police reported a fire at the vacant Worcester Cold Storage Warehouse building. The brick building was approximately ninety feet tall, "L" shaped,

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and 185 by 150 feet in size. Built between 1905 and 1910, the interior walls were 18 inches thick, made of brick, covered with six to eighteen inches of asphalt impregnated cork for insulation. There were windows in the office area of the building, and only one interior stairwell in the structure (M. McNamee, personal interview,23 July, 2008). The building had been vacant for twelve years, (Eisner, 2000) and the arriving firefighters found the fire located on the second floor. The firefighters were told by the police about ten minutes after they arrived at the scene that some homeless people had been living in the building for several weeks. A search was immediately initiated by Chief McNamee who sent two-man rescue teams to the different floors.

At 6:46 pm two of the rescue personnel conducting part of the search reported via radio that they were lost on one of the upper floors of the building. It was impossible to determine exactly which floor they were on, so Chief McNamee diverted his entire third alarm force to the search effort on the fourth, fifth, and sixth floors. He was in radio communication with the lost men and heard them running out of the air contained in their breathing packs. One of them said, "Look, if you don't find us soon, we're going to die up here." The smoke condition was at zero visibility. The lost firefighters' loud personal locator alarms could be heard sounding in the background of the radio transmissions, but none of the rescuers in the building could hear the alarms because the sound was absorbed by the thick wall insulation, and because they had apparently gone so deeply into the building. The sound never got out of the immediate area that they were lost in.

At 7:14 pm one of the search teams looking for the lost men requested assistance on the fifth floor because they too were running low on air and had become disoriented. It was the two man search team from Ladder Company 2 who had been joined by two additional men from Engine Company 3, which shared the same fire station with them. Chief McNamee sent additional rescuers to the fifth floor to try to assist these additional lost firefighters. Their last radio call to the chief was "Ladder 2 to command, we're done..." the balance of their communication was cut off, but no one on the fire ground heard it.

The rescue effort had quickly changed from that of searching for two missing firefighters, to searching for six.

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The search went on for half an hour, with the chief continuing to send in search crews. The chief was simultaneously directing the firefighting operation, and was fully aware that the fire conditions in the building were getting worse and having an impact on the search efforts. He had taken a position at the bottom of the single stairway in order to maintain his awareness of who was in the building searching, and those who were waiting to enter to start searching. That group always numbered 10 to 12 people. As each search group came down the stairs, the chief would replace them with another group to continue the search. An hour after the original call for assistance was heard, returning search crews reported that the fire and smoke conditions were so bad that they were not able to gain access to the floors they had been searching on previously because the fire had continued to grow in size and intensity. The chief thought that the search had been ongoing for 15 or 20 minutes, and was shocked to discover that it had actually been under way for approximately an hour and 15 minutes. At that moment, the chief paused the rescue operation while he reconsidered the situation. He realized that this was no longer a rescue effort but a recovery, and it had been so for a while. He thought that there was nothing to be gained by sending additional search teams into the building, but that there certainly could be additional losses if he continued to send additional personnel to the search effort. Although the missing men were close personal friends of

the chief, and that was a factor committing him to the rescue effort, looking at the men waiting to enter the building, he thought "I cannot do it to these guys." and "This is good after bad."

The chief stood in the doorway to block entrance to the stairs and looking at the waiting rescuers said, "That's it. That's it. No more." There was an immediate, emotional, and angry response from those firefighters waiting to enter the building to continue the search. Chief McNamee yelled at them saying, "We've already lost six. We're not going to lose any more." The chief described the physical reaction of the firefighters as seeming "...like they all collectively got punched in the gut with the reality ..." he said they felt like they had failed at the rescue attempt, and they had failed their friends who were trapped in the building.

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It took eight days of continuous searching in the remains of the building to recover the bodies of the six deceased firefighters (M. McNamee, personal interview, 23 July, 2008).

Chief McNamee advised that some of the factors he considered in making his decision were similar to what was evident in the previously described scenario:

a) The time being expended in the search did not favor a successful outcome.

b) The fire continued to grow in size and intensity.

c) The amount of air available to the trapped men in their breathing devices was limited.

d) The trapped men were his close personal friends.

e) The situation for the trapped personnel was a no-gain condition as compared to a potential additional loss condition for the searchers.

f) Continuing the search was expending resources in a futile effort.

g) He could not ask the remaining rescuers to do more after they had already gone beyond the expectations of duty.

A number of issues from the observations and principles of the other disciplines are clearly evident in this scenario

1. The duty to rescue.

2. Harming some to save others.

3. Equal treatment and equal chances.

4. The significance of status.

5. Do numbers count when not everyone can be helped?

1. Philosophy

a. The Duty to Rescue

Within the parlance of the emergency services, "rescue" describes an attempt to save a living individual, while "recovery" denotes efforts to gather the remains

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of the deceased. The term "search" can be applied to the task of finding either of the above. The full capacity of the fire department was being utilized in an attempt to extinguish the fire and simultaneously rescue an increasing number of its own personnel. Although the spatial distance between the rescuers and the victims was not known specifically, and it could have been substantial, the temporal distance created by the visibility barrier and the fire conditions greatly increased what may have been the effects of the actual spatial distance. Due to the worsening fire conditions and the increasing loss of additional rescue personnel, it was highly doubtful that the firefighters would have been able to successfully reach those in the building. The actual and potential aggregate cost of the rescue attempt and the risking of other lives exceeded the requirements of duty. This was particularly pertinent at the moment that the chief recognized that the rescue effort had in fact become one of recovery.

There are multiple philosophical observations and comments that have an influence or direct nexus to the above summary as regards the duty to rescue:

> **a)** We must distinguish the possible moral importance of absolute proximity (nearness) from relative proximity and from just any difference in distance. (Kamm, 2000, p. 2)

1. The chief had a duty to commit personnel and resources to the search and rescue attempt for the missing firefighters. While there is sufficient discussion among philosophers concerning the relationship between the duty to rescue and the proximity of the victim, it is also understood that distance is not measured only by proximity but by the time it would take to reach a victim. The layout of the building, the smoke, and the fire conditions can overpower actual measurements of distance, or as Chief McNamee noted about visibility in the smoke conditions in the building, "If you missed them by 6 inches, you missed them by a mile."

> **b)** But perhaps nearness is then mostly a function of the length of time it takes to traverse a physical distance. (Kamm, 2000, p. 15)

2. The conditions faced by the firefighters in the warehouse was definitely one of distance as a time measurement rather than a length measurement, although the size of the structure would also have permitted physical distance to be a factor in and of itself.

> **c)** In... [the rescuers case], we may be assured that our efforts will be efficacious; in the [trapped firefighter's case], perhaps we cannot be sure that our efforts will pay off. (Kamm, 2000, p. 5)

3. The chief not only had the responsibility to attempt a rescue of the missing firefighters, but he also had to maintain the safety of his remaining personnel. By putting an end to the search he could be certain that no additional firefighters would be harmed, whereas continuing to commit more personnel to the search provided no such assurance.

> **d)** Then if we aided in one case, what reasons could we give for not-aiding in the next case, and then the one after? But the aggregation of all the aid would consume much of our life. We are not required to give up so much in order to aid it might be said. (Kamm, 2000, p. 11)

4. There are few examples where a philosopher's comments have such an exact correlation to an actual emergency than what can be seen in the discussion of the aggregation of effort. It was clear to the chief that the loss of the personnel that had already been committed to the search fully exceeded any requirement of duty to commit additional resources.

> **e)** The strength of the duty may vary with social membership – stronger to one's own society, weaker to other societies (other things equal) – even if it does not vary with distance, as the individual's duty of rescue seems to. (Kamm, 2000, p. 31)

5. Even when one considers the impact of a firefighter's responsibility to protect and save the life of another firefighter, the commitment made by the chief had fully satisfied any such requirement at the time he decided to end the effort.

> **f)** Even if there is no distinction between the cases taken individually, the cumulative effort or cost is different in aiding one versus many. Even if there is no magic cutoff point such that the difference between aiding ten

and aiding eleven, for example, will involve making more of a total effort than is required, we can set an arbitrary cut off so as to aid some but not to go on aiding when the aggregate total will clearly be more than required. (Kamm, 2000, p. 11)

6. The chief could have viewed each rescue assignment independently. That is to say, first, there was a search for the homeless; second, there was a search for the two rescue firefighters; and third, there was a rescue operation looking for the Ladder 2 team, and he could have continued to commit additional firefighters to each of these rescue efforts separately. However, he considered the task as a cumulative effort, recognized the "aggregate total" cost involved and ended the effort in order to "aid" the remaining firefighters.

> **g)** Having performed a strenuous stringent duty can make it permissible to refuse to do a strenuous superogatory act or any less stringent duty, if what was involved in the stringent duty depleted the resources also needed for those other acts. (Kamm, 2000, p. 32)

7. By any measure the chief's rescue effort that lasted in excess of an hour in a fire and smoke filled building was a "superogatory act" that was depleting the personnel resources that he would have required to continue such acts.

b.   *Harming Some to Save Others*

The chief was presented with a situation that demonstrated that all attempts to save the missing firefighters was steadily increasing the probability of, and actually harming, other firefighters. It must be noted that the harm befalling the firefighters was not caused by the chief but by the fire condition itself; and the chief was simultaneously giving maximum effort to reduce the fire conditions which would have resulted in further harm to his personnel. The chief was fully aware that the potential for additional harm was rapidly outpacing the possibility for success in rescuing those who had already been harmed.

Again, there are multiple observations available from the other disciplines that allude to the relationship between harming some and saving others:

a) It is permissible to cause harm to someone [the trapped firefighters] in the course of achieving the greater good of saving a greater number of others [the rescuers] from comparable harm, if events which produce the greater good are not more intimately causally related to the production of harm than they are to the production of the greater good. (Kamm, 1989, p. 232)

1. While the chief did not himself "cause harm" to any of the lost firefighters (the fire was the cause of the harm), his decision to see to the "greater good" of his remaining personnel as regards the threat to them from the fire also is exactly within the philosophers observations about such a set of circumstances.

b) ... an event [ceasing rescue operations] which removes a direct threat to the greater number [rescuers] may cause a comparable direct threat to the lesser number, [the trapped] but may not in itself be a direct threat…. in [this case] therefore, the [ceasing rescue operations], our means to the greater good,[saving the rescuers] has at least as intimate a causal relation to the greater good [firefighters saved] as to the lesser harm [the loss of the trapped]….The conclusion is that the redirection [ceasing rescue operations] is permissible. (Kamm, 1989, p. 233)

2. By ordering an end to the search operation, the chief redirected the life threatening conditions away from the remaining firefighters, which was a direct and good "causal relationship" to them. The harm that had befallen the lost firefighters had already occurred, and the chief's decision therefore had no more an intimate relationship to that harm than it did to the good that came to the remaining firefighters.

c) ...if actively *causing* a death that is not intended, but merely foreseen to be a side effect of the means used to save [the rescuers] is not permissible, it would follow that just passing by a dying person on the way to saving the [rescuers] should also be impermissible. But this makes it impossible to ever save some [the rescuers] rather than others [the trapped] in situations where we cannot save everyone... (Kamm, 1989, p. 232)

3. The chief did not cause any of the deaths that occurred. The cause of death was the fire itself. The early rescue attempts, including the additional commitments, were done under an impression that significantly less time had actually passed and was within standard operating conditions. At the time he made his decision and the actual passage of time was realized, it was evident that so much time had elapsed

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for the lost firefighters, that it was no longer possible that they could still be alive. His decision to save the lives of the rescuers foresaw the condition of the lost firefighters, and he, therefore, made the decision to save his remaining personnel.

> **d)** ...it is permissible to act with the intention that the lesser harm occur as a way of *maintaining the greater good* already achieved. (Kamm, 1989, p. 240)

4. The chief had to maintain the lives and safety of the rescuers, knowing what harm had already occurred to the lost firefighters, which, of course, he never intended.

> **e)** ... another point of view... would not find [harming the trapped] by [removing the rescuers] objectionable.... This point of view does not emphasize doing versus bringing about, but emphasizes rather the [chief's] having a sufficient hands-on buffer between himself and the harm [that results]. Greater good [saving the rescuers] would provide such a buffer for a harmful aspect of the act – you can't get your hands dirty when you're wearing "greater-good gloves." (Kamm, 1989, p. 250)

5. Both the chief and the lost firefighters themselves were responding to the requirements of duty when they entered the building with search and rescue assignments. The chief's commitment of these resources had a singularly good intention, the rescue of victims. Similarly, his decision to stop the rescue efforts also had a "greater good" intention, the saving of the lives of the remaining rescue personnel. He was therefore more than sufficiently insulated from any cause and effect relationship with the harm that occurred.

c.   *Equal Treatment and Equal Chances*

The chief gave each incident of trapped firefighters equal attention and equal resources in an attempt to save their lives. At such time as it became obvious that the deteriorating fire conditions made additional rescue efforts untenable, he then provided the same life-saving attention to the rescuers that he had given to the trapped members for as long as he believed it had been possible to save the victims.

Philosophy provides a number of examples that demonstrate thoughts on the relationship between equal actions and equal opportunities:

> **a)** ...I believe, with it being better to save the greater number in what I shall call *partially conflict-free situations*, situations in which at least one person must die but we have a choice whether more than one shall die. (Kamm F. M., 1985, p. 179)

1. Once the chief realized that his initial rescue personnel could not still be alive, he turned his attention to the larger number of firefighters whose lives would be put at risk if the search continued any longer which was the "better" focus.

> **b)** ...If [the rescuers] die, no one of the [rescuers] will lose more than the [trapped] person would lose if he died, and no matter what happens at least one person must die. Still we should save more of the group of [rescuers] because we are concerned for the loss to each individual, and each additional person of the [rescuers] whom we save has his condition improved without making conditions worse for anyone else. (Kamm, 1985, p. 180)

2. The trapped firefighters had already succumbed to the effects of the fire which meant that their condition could not be "improved." In order to prevent the remaining firefighters from losing their lives also, the chief turned his attention to his concern for their individual lives and ordered an end to the operation.

d. The Significance of Status

The chief recognized that each of the trapped firefighters were due the recognition and respect that came from their willingness to put themselves in harms way for the sake of others. In recognition of the performance of that duty he, and their fellow firefighters, were obliged to take the steps necessary to come to their aid as each of them knew that the trapped members would have done in turn for them. This is a professional obligation that each firefighter accepts, just as they recognized that they also had an obligation to do the same for civilians. However, that same principle applies to the chief's responsibility to secure the safety and lives of the rescuers. Their equal status required equal treatment.

Certain philosophers believe that persons are an end-in-themselves, and how others interact with them is established by certain constraints that reflect their rights as persons:

> **a)** ...there may be a right to have one's [the trapped] life saved, but it is a less stringent right than the right [of the rescuers] not to be killed (Kamm, 1992, p. 366)

1. The chief's initial dedication to saving the lives of the homeless, and then of the rescue firefighters, was exemplary. He then quickly grasped that the remaining firefighters also required his protection, which was when he turned the focus of his dedication and duty towards maintaining their safety.

e.   Do Numbers Count When We Cannot Help Everyone?

The chief was in an exceptionally difficult position with regards to his duty and commitment to rescue the six missing firefighters as compared to the numbers of rescuers being included in the effort. Throughout the entire search, it was evident that the chief was willing to commit whatever resources might be necessary to locate and save the trapped members. There were multiple, variable factors that were changing continuously which affected the proportionality of rescuers to trapped firefighters, these were that: the intensity of the fire continued to grow, the number of missing firefighters continued to increase, and the length of time the breathing apparatus of the trapped men would have continued to function was diminishing. As the amount of time for each pair of firefighter's life sustaining air diminished and then ended, it became clear to the chief that they could not be saved and that he was no longer directing a rescue effort but a recovery effort. At that juncture, the danger to the numbers of the rescuers came into direct contrast with the number of victims.

There is ample discussion among the other disciplines about these very explicit conditions vis-à-vis the numbers of people involved and the ability to help them:

a) ... from an impartial perspective, of making substantial sacrifices for the sake of substantial gains to others, ... they don't see the point of making substantial sacrifices if such sacrifices fail to have a significant impact on the lives of others. This view is supported by the Minimize Great Additional Burdens View (Temkin, 2005, p. 223).

1. The groups of rescue firefighters understood the sacrifice that might be expected of them to bring "substantial gains" to the personnel who were lost in the fire building. It would of course be reasonable for them, and for the chief, to question the necessity of such sacrifices when there would be no possibility of success gained by those sacrifices.

> **b)** Why then may [the chief] not stop the aid once started, in order to help others more, if the [trapped] will be no worse off overall and being in the [effort] gave [the trapped] a chance? Must the fact that the [trapped] gets worse again through failure to continue what has already been done be definitive? I suggest not… First, [The chief] would be refusing to continue aiding, and this is not, strictly, harming… Commitments may be overridden, for example, by the attempt to help greater numbers of people, especially if these are also one's [responsibility]… Most importantly, the idea of a commitment to a [firefighter] suggests that a [chief] would be wrong to stop [efforts] that had not yet had **any** effect on the [trapped] when the [chief] knows that continuing [efforts] will lead to some subnormal improvement in the future. But I do not believe that the [chief] would be wrong to drop [efforts] for such a [firefighter] in order to offer it to others who can reach normality. (Kamm, 2002, p. 376)

2. The only chance the trapped firefighters had to be rescued was through the efforts of the rescue teams that the chief was dispatching to search for them. At the point at which he realized that the men could not be saved, it was also true that the trapped firefighters' condition could not have been made worse by his ending the search effort. This decision did not bring harm to the trapped firefighters, since the causitive reason for the harm was the fire itself, and his response to what he could do for them now must naturally be overridden by his responsibility to protecting his remaining firefighters. The trapped firefighters could never return to "normality," whereas, the remaining firefighters need to have their normality maintained.

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c) ... justice demands that each person on one side should have [their] interests balanced against those of one person on the opposite side; those who are not balanced out in the larger group help determine that the larger group should be saved. Hence, the number of people saved counts morally. (Kamm, 2002, p. 378)

3. When the chief said, "No more," he was expressing an equation that balanced the lives of those who had already been lost against those that needed to be protected. The group that needed to be protected (the rescuers) was substantially larger than those who needed to be found (the trapped); therefore, in this event, the chief had a moral responsibility to see to the needs of the larger group.

d) ...suppose we have a choice between helping one person, A, who will be very badly off and much benefited by our aid, or helping a couple of people, B and C, each of whom will be as badly off as A but not benefited as much by our aid. As long as the lesser benefit is significant, it is morally more important, I think, to distribute our efforts over more people, each of whom would be as badly off as the single person, rather than to provide a bigger benefit concentrated in one person... (Kamm, 2002, p. 380)

4. Had any one of the lost firefighters been located by the searchers, he would have been "much benefited by our aid." However, as had already been demonstrated, continuing the search was exposing additional firefighters to becoming "as badly off" as the lost members; but doing less of an effort (ending the search), as compared to the effort of the search itself, actually bought benefit to the larger group. The chief was therefore distributing his efforts over the wider group of firefighters rather than concentrating them on the smaller sized group.

e) The principle that accounts for these judgments is that when need and urgency are constant, we ought to [take care of] whoever allows us to [take care of] as many people as possible, at least when the greater number of people will be helped significantly. (Kamm, 2002, p. 383)

5. While there was a clear need to rescue the trapped firefighters, there was also an equal need to protect the rescuers. As the amount of time increased beyond which the trapped firefighters could survive, the urgency of their situation actually

diminished in comparison to the urgency to protect the rescuers from the rapidly increasing fire threat. The chief's decision was clearly one wherein "the greater number of people will be helped significantly."

2. Theology

a.   The Duty to Rescue

Due to the worsening fire conditions and the increasing loss of additional rescue personnel, it was highly doubtful that the firefighters would have been able to successfully reach those in the building. The aggregate cost of the rescue attempt and the risking of other lives exceeded the requirements of duty. The decision for the chief included contrasting the requirements of duty with the number of lives apparently already lost with those that could still be potentially lost in a continued rescue attempt.

> **a)** ...the principle [of Double Effect] is that of in the service of a greater good, you tolerate a lesser evil that may come about in the course of pursuing greater good. (Ruff, personal communication, 2008)

1. When the chief made his decision, he realized through his experienced based knowledge that the trapped firefighters were no longer alive. Inasmuch as that outcome could no longer have been changed by continuing the search, he had to "tolerate" that understanding and proceed with addressing the "greater good" of ensuring the safety of the remaining firefighters.

> **b)** [on applying the Principle of Double Effect] ...we use the example of firemen, I know that there are probably times when fire chiefs make a decision like that. They look at a building and they look at the state that it's in, the severity of the fire and so on and they might say, "We're not sending anybody else in there. There's no way that they're going to come out." And so at this point we can't save the lives of the people that may be in the building, but we aren't going to risk any more. That would be my guess. (D. Ruff, personal communication, 13 June, 2008)

2. Upon evaluating the requirements of duty against the loss of life that had already been inflicted on his personnel, the chief had reached that point that the theologians understand as being beyond the requirements of duty.

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c) [on applying the Principle of Double Effect]…my presumption was that the person making the call would be making a judgment that, in fact, there was no possibility of good coming out of this further assistance. Based on their experience, looking at the situation, looking at this fire, looking at the state of this building, they're pretty convinced that any further firefighters that they send in are going to be seriously, seriously injured or killed and probably will not have any success in rescuing. At least that's how I was thinking about it. (D. Ruff, personal communication, 13 June, 2008)

3.   The theologians recognize that the potential for success is one of the elements of decision making in life and death circumstances and that at such time as there is no possibility of success and realizing that the risks outweigh that possibility, a decision, based on the chief's experience, was acceptable.

d) [on applying the Principle of Double Effect] ... .and his best judgment is that it's not going to be possible to save the lives of perhaps the victims in the building and that very likely it's also going to cost additional lives of firefighters. (D. Ruff, personal communication, 13 June, 2008)

4.   The chief's decision considered the fact that further efforts in the building, in all probability, would have resulted in additional lives being lost.

e) Yet not even those who engage in the most hazardous work… straightforwardly accept death as a side effect; they only risk it, while expecting, hoping, in doing their best to survive. Risking death is conditionally accepting it: "Doing this, I know that death will ensue if things go badly, and I accept that." Thus, the same principles that determine the moral character of accepting death as a side effect determine the morality of accepting a risk to one's own life or another's…"because one has a stronger duty to take care of one's own life than another's" (Grisez, 1993, p. 485)

5.   Firefighters understand that in their profession death, whether their own or someone else's, is an ever present possibility. That knowledge is part of what they accept in their work environment. That does not mean that they are cavalier about it, just that they accept it as a reality; but they also recognize that they have a responsibility to protect themselves.

f) ...we shouldn't try to save a life that can't be saved. Have you reached the conclusion honestly, let's say, have you honestly reached the conclusion that this life cannot be saved? If so, then I cannot, and should not, commit personnel…I think this allocation of resources is a real factor in what were talking about ... you made your point when you say this has become prohibitive and so we stop…I would say you could come to the conclusion that we really cannot accomplish our intended goal so there's no point in having people go into a situation where their life could be thrown away. (V. Genovesi, personal communication, 9 July, 2008)

6. The chief's decision was arrived at after concluding that the lives of the trapped firefighters could not be saved. The theological view is that once that point had been reached, it would not have been acceptable to continue to commit additional firefighters to the effort and therefore possibly risk their lives also.

C.   CONSIDERED RISK CASUALTY EVENT C

Increasingly uncomfortable hours.

First Deputy Fire Commissioner Frank P. Cruthers[9]

Frank P. Cruthers is the First Deputy Fire Commissioner of the New York City Fire Department (FDNY). He has 40 years of service with the FDNY, having risen through the ranks from firefighter to his current position. On September 11, 2001, he held the position of Assistant Chief of Department, and his regular rotation command assignment that day had been that of City Wide Tour Commander. The circumstances that morning resulted in his being one of the Incident Commanders at the World Trade Center.

Chief Cruthers arrived on the scene of the attack on the World Trade Center after the second plane had hit the south tower. He immediately sought out and made contact with the Chief of Department at the department command post on West Street to confer on the immediate conditions, operations, and command responsibilities. Approximately

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[9] Frank P. Cruthers is First Deputy Commissioner of the New York City Fire Department, the world's largest. He is a forty year veteran of the department having risen through the ranks, starting as a firefighter in 1968. The Commissioner is known and respected throughout the fire service, and has lectured nationally and internationally.

10 minutes after his arrival, the south tower collapsed. Having survived the collapse, the chief was making his way north through the buildings of the World Financial Center, opposite the Trade Center, to reestablish a command post north of the immediate collapse area when the north tower also collapsed.

[The World Trade Center consisted of multiple buildings occupying a sixteen acre site bounded: on the west by West Street (a median divided highway); on the east by Church Street (a six lane wide street); on the south by Liberty Street (a narrow, one-traffic-lane wide street); and on the north by Vesey Street (a two traffic lane wide street). The addresses of the towers were One and Two World Trade Center respectively, and the remaining buildings that formed the perimeter of the sixteen acres were designated as Three through Six World Trade Center. An additional forty-seven story building, Seven World Trade Center, the only building in the complex outside the sixteen acre perimeter, occupied a space on the North side of Vesey Street opposite the north tower.]

The collapse of the north tower sent debris into and around building seven, starting a fire within the building and doing significant structural damage. Some time later that morning or early afternoon a deputy chief in charge of operations came to the command post and advised the chief that he had been approached by several battalion chiefs and other deputy chiefs with concerns about the stability of the Seven World Trade Center building, which by this time had an extensive fire condition.

At that time he believed that there could have been as many as 50,000 people in the trade center when it collapsed. There were also upwards of 1000 firefighters, police officers, ambulance personnel, and other rescue workers on the debris pile attempting to search for and rescue both the civilians and the original firefighters, police officers, and other emergency workers who had been in the buildings at the time of the collapse. Seven World Trade Center was approximately 500 feet high and given its proximity to the original World Trade Center site perimeter, he knew a collapse of this building would spread a debris pile hundreds of feet into the existing and ongoing search area then occupied by those 1000 rescuers.

The chief quickly considered and evaluated the information that was available as well as the additional threat to the lives of the rescue workers that a potential collapse of that forty-seven story building would represent, and ordered that everyone be evacuated from an area sufficient to encompass a debris field that would be created by the collapse of a building of that size. The 360° collapse evacuation zone included a major percentage of the existing debris pile and ongoing search area of the original World Trade Center site.

The search area was a scene of highly charged emotions and super-human efforts by the rescuers to reach their fellow firefighters, friends, co-workers, and anyone who might possibly still be alive in the rubble. The chief's order effectively halted those searches over a large area of the collapse site and removed the rescue personnel to a safe distance. At approximately 2 p.m. a meeting was held at the command post with a large number of the senior chiefs on the scene to evaluate the progress of the conditions and operations. Among the things discussed was the status of the stability of Seven World Trade Center and if the evacuation order for its potential collapse zone had been too conservative. It was immediately agreed by all those in attendance at the meeting that the evacuation order was fully appropriate and warranted.

At approximately 5:20 that afternoon, after burning for seven hours, Seven World Trade Center collapsed, (Federal Emergency Management Agency, 2002, pp. 1-8) causing no additional deaths or injuries, thereby validating the chief's earlier evacuation order. The chief was aware that during those hours a tension existed on site between the desire to continue the search and rescue efforts and the assessment of the building's stability with regards to the actual threat it may have represented to the personnel working there. That tension caused the chief to recall, "Increasingly uncomfortable hours." (F. Cruthers, personal communication, 1 August, 2008)

Chief Cruthers advised that when first informed about the issue of the stability of Seven World Trade Center, his decision to clear a collapse area was largely based on the types of experience and operating procedures that are typically found within the New York City Fire Department. He initially described the decision as "...more simplistic..."

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than what might have been expected; however, upon further analysis it was determined that the factors involved in the decision included, but were not limited to the following:

a)   The ongoing search for their fellow firefighters, police officers, etc.

b)   The viability of the victims.

c)   The likelihood of success.

d)   The nature of the hazard.

e)   The potential cost of the effort.

f)   The proximity to the victims.

g)   The magnitude of the scene.

h)   The collapses that had already occurred.

i)   The anticipated collapse of Seven World Trade Center.

j)   The extreme number of lives that were in danger.

k)   That the guiding factors learned in previous events were applicable at this scene.

l)   That he had to do everything possible to not lose more lives.

m)   That dangerous activities would need to be undertaken in the current search condition.

n)   That if there is no life to be saved, don't risk life. (F. Cruthers, personal communication, 1 August, 2008)

While it is clear that a significant number of the above decision factors have a nexus to the core concept of Considered Risk Casualties, a sample of the most prominent observations from the other disciplines that also have a direct corollary to the above factors are as follows:

1.   Rationing scarce resources.

2.   The Harming-Versus-Not-Aiding distinction.

3.   Equal treatment and equal chances.

4.   The difference between "killing" and "letting die."

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5.   Discontinue non-futile use of a scarce resource.

6.   The significance of status.

7.   Harming some to save others.

8.   The duty to rescue.

9.   Ethical values.

1.   Philosophy

a.   Philosophy and Rationing Scarce Resources

While there were over a thousand rescuers working at the World Trade Center site, given the magnitude of the destruction, the size of the area involved, and the belief that upwards of 50,000 people were in need of rescue or recovery, the resources available to do that task were not only finite but could have been considered as scarce. Additionally, the threat presented by the potential collapse of Seven World Trade Center could have significantly increased the number of deaths already inflicted, and it would have further diminished the expertise and resources that were needed at the time and that would continue to be required in all future operations. The need to husband those resources can be seen as a factor in the decision to evacuate the collapse zone.

There are several philosophical views and comments related to the above analysis concerning the rationing of resources:

> **a)** If an organization can help a few people a lot, or many people a little, it makes a great difference whether they will face similar choices many times, and also whether it will be the same or different people who are affected each time. If the choice-situation is rare, it may be morally imperative to help the few a lot. Similarly if the choice-situation is frequent, but different people will be involved each time, it may again be morally imperative to choose on each occasion, so as to help the few a lot, rather than the many a little. (Kamm, 2007, p. 276)

1.   The chief's decision to assist the smaller group (the rescuers), by completely evacuating them from the collapse danger zone, was preferential to potentially assisting the larger group of individuals who might have been located

throughout the original debris site. If any trapped victims had been found, the assistance afforded them would constitute helping "many a little," as compared to helping the "a few a lot." It was "imperative" that the chief see to the safety of the rescuers.

> **b)** ...we are concerned with the allocation of resources, though...sometimes concern for benefits that come of the resources must come into the picture. (Kamm, 2007, p. 264)

2. Through this decision it was clear that by maintaining the safety of the rescuers "resources" the "benefits" they could have provided throughout the ongoing search, rescue, and recovery operation were highly valuable resources that needed to be ensured.

> **c)** (...it could be relevant to allocation that we are more certain of outcomes in one group than in another, even though the latter has the potential to achieve better outcomes.) Sometimes, differential outcome should be relevant to allocating ... (Kamm, 2007, p. 266)

3. One of the factors the chief was considering in his decision-making process was the future work that would need to be done at the site. It was certain that maintaining the rescuers safety, cohesion, and capabilities would have resulted in a "potential to achieve better outcomes" as described in the concept of the philosopher.

b. *Philosophy and Harming-Versus-not-Aiding*

The chief did not bring harm to anyone. The harm that had been inflicted, and would continue to be inflicted, had been created by the terrorists. However, the chief had been placed in a position of having to make a decision about suspending aid to those who were already harmed (the victims) and those who needed to be protected from being harmed (the rescuers). Therefore, the chief had to factor the distinction between these two dynamics simultaneously in two different groups.

The other disciplines address the distinctions between harming and not aiding thusly:

a) ...we say either (a) that, with the [decision], four hundred people instead of six hundred will lose their lives or (b) that, with the [decision], we will save two hundred lives of the six hundred. In description (a), the baseline suggested by the phrasing is a state in which people are now well but face getting worse; the baseline suggested by the phrasing in description (b) is the near-death state people will be in if there is no intervention, but from which there can be improvement. Subjects think it is worse if two hundred people lose life than if they do not gain it and are more averse to a [decision] in which people lose their lives rather than in which the same number are not saved. (Kamm, 1998, p. 466)

1. At the time of the decision, it was not possible to apply a numerical description to indicate proportionality between the number of potential victims and the number of rescuers as an element in the chief's decision. This was due to the fact that the number of victims, either dead or alive, was unknown. What was known was that a failure to evacuate the rescuers from the danger zone would have resulted in additional deaths beyond what had already occurred as compared to the possibility that none of the already trapped victims could have been saved. Loss of additional firefighter's lives at that point would have been seen by society as reckless.

b) Notice that the distinction between loss and no-gain is different from the distinction between an *imposed loss* (harm) and a *denied gain* (not aiding)... (Kamm, 1998, p. 471)

2. Without the chief's decision, one would have had a condition for the rescuers in which leaving them in the danger zone could have resulted in a "loss and no-gain" because of not being evacuated; this is in comparison to the "imposed loss" directly inflicted on the victims by the terrorists and the "denied gain" circumstance created for the existing victims by the subsequent collapse threat. This was also created as a consequence of the terrorist attack.

c) The harming-versus-not-aiding distinction is often present in cases in which there is a distinction between someone's losing what he would have continued to have [life] independently of our help (when we harm) and his losing what he would not have continued to have [life] independently of our help. (Kamm, 1998, p. 473)

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3. It can be discerned that the loss of life (harm) created by the terrorists was clearly distinct from the temporary condition of not aiding that might have resulted from the chief's decision, since there could be no additional loss that would have befallen the victims, inasmuch as there would not have been the possibility of improving upon the harm done to them already without the assistance of the rescue workers.

> **d)** However, if ... the baseline is always set by what would happen without intervention, prospect theory would predict that not preventing death should always be seen less negatively than causing a death (assuming death is bad for a person). This is because staying at the baseline is a no-gain and is better than moving down. By contrast, causing death moves someone down from a baseline set by projecting continued life, if no intervention ensues. (Kamm, 1998, p. 473) [This observation can be applied inversely to both the rescuers and the victims simultaneously.]

4. The "baseline" for whatever victims existed in the collapse area at the time of the chief's decision had already been established by the original collapse. Those individuals would have stayed at that level of condition without the assistance of the rescuers. The "baseline" of the rescuers absolutely would have been "moving down" unless they were removed from the immediate danger zone. The chief's decision was clearly "projecting continued life" through his intervention to ensure the safety of the rescuers.

c.   *Philosophy and Equal Treatment and Equal Chances*

Further refining what is alluded to above, that the chief in this situation was presented with a condition of opposite preferences in relationship to the same threat, i.e., what would help one category of individuals (the victims), could have harmed the other category of individuals (the rescuers). Inasmuch as their levels of current harm were unequal, but their exposure to the threat of the additional collapse was the same; it was still an unbalanced equality of treatment and chances situation.

Although the described situation is somewhat unique vis-à-vis the existing condition in comparison to the threat, one can extrapolate guidance from the following philosophical observations:

a) ... treating people as equals involves counting each one's preference; this is something we simply owe each individual as part of treating him as an equal. Indeed, it might be that the greater number of individuals [the victims] actually preferred that the single person [the rescuers] be saved instead of themselves. In such a case the view for which I am arguing would recommend that the single person be saved even if it were in some sense impersonally better that the greater number be saved. Since what we would be doing in this case would be based on counting each person's preference even when this conflicts with saving the greater number, letting each person's preference count cannot be based on the value of the greater number being served. (Kamm, 1985, p. 181)

1. While the lives of the rescuers and the lives of the victims are naturally seen as having equal value, the thought of what the difference the rescuers, as compared to the victims, could bring to the ultimate results of the rescue effort would have had to be a consideration in the decision making that went beyond the intrinsic value of individual lives. Even though the number of victims was believed to be "the greater number," the responsibility that the chief owed to the living rescuers was to save their lives, not only because it would reflect what he believed would have been their preference but because their (the rescuers) services would have been needed to assist those who were already victims of the event.

b) Preference ... [between solutions] ... would indicate a strong preference for *equality of results*. That is, it would indicate that it is (a) the same chance for a fate *shared* by all which is preferred over (b) the same chance for a fate which will not be shared by all. The preference for equality of result could be so strong that it overcame an alternative prospect of definitely saving ... lives while providing each person with an equal chance to survive ... The preference would indicate the fact that unequal *results* may come of equal chances ... is a negative factor. (Kamm, 1985, p. 190)

2. Permitting the rescuers to work in the new danger zone would have extended the condition of the victims to now also include the rescuers. Such an event would have become an *"equality of results"* circumstance. Conversely, maintaining the rescuers ability to function because they were evacuated, presented the potential for having the victims share a fate equal to that of the rescuers, i.e., being saved, rather than the opposite.

As in previous scenarios, there is, of course, no suggestion that "killing" by the emergency services was ever an issue or factor. However, there was killing and injury on the part of the terrorists, and the emergency services, as a result, could have been placed in a position of making decisions that resulted in "letting die" possibilities. While there has also never been any indication that a "letting die" circumstance occurred at the trade center, the potential for such a decision element was present and is therefore worthy of review. During the interview, the chief advised that he recognized the existence of such a potential, and he noted that if trapped victims had been located within the collapse evacuation zone, the decision he was required to make would have been substantially more complex.

Some philosophical distinctions concerning the difference between "killing" and "letting die" are as follows:

> **a)** In letting-die cases one refuses to make efforts that would provide life to someone already under threat of death. Efforts made to avoid killing in standard cases are not efforts that would provide someone already under threat of death with continued life. Hence the functions of the efforts refused by the non-saver and by the killer are different. (Kamm, 1993, p. 24)

1. The chief's decision to evacuate the collapse zone did not initiate or bring an additional harm to the victims who had already lost their lives, or been put in a life-threatening situation by the terrorists, which was the true act of "killing." With that decision, it might have been possible that conditions of "letting die" would have ensued, but the magnitude of the situation was such that there was never any indication that original victims remained alive at the scene. Conversely, failing to evacuate the rescuers would have placed them directly under threat of death.

> **b)** Once someone else already stands in a saving relation with B, or B is independent of my assistance and dependent on no one else, my interference takes from him something he already has. It prevents his having it from continuing into the future as it otherwise would. When I prevent someone from initiating aid to him I do not, in the same way,

prevent the continuation of some state that already existed and would continue in the future. It is in the former, not the latter, type of case that we speak of killing. (Kamm, 1993, pp. 25, 26)

2. No trapped, living victim had been located at the time of the evacuation order, and hence no known victims were prevented from gaining the continuance of life through the rescuers' assistance. The evacuation order therefore did not remove any life that "would continue into the future."

c) If an agent terminates aid and so allows a potential cause of death actually to kill someone, but it is aid that the agent himself was providing, or aid that belongs to the agent then we have a *letting die*. (Kamm, 1993, pp. 28, 29)

3. Since the ability to save was entirely within the domain of the rescuers, and without which (had there been any known living victims in the rubble), the victims would have had no chance of survival at all, the suspension of that aid could never be interpreted as a "killing" as compared to the acceptable "letting die."

d) ...the following properties...are conceptual components of letting die:

...Letting die does not itself create an original cause or an original threat of death.

...The victim of letting die faces a cause of death independent of any the non-saver produces in virtue of non-saving.

...The victim loses only life he would have had via the agent.

...Efforts made by the agent could have provided the victim with continued life.

...The nonsaver exercises control over what is his. (Kamm, 1993, p. 31)

4. The original cause of death was due to the acts of the terrorists and was in no way associated with any of the subsequent acts of the rescuers. The victims' conditions were such that the only possibility for them to live would have been through the efforts of the rescuers. Thus, the removal of the rescuers from the location in order to

save their lives would have been within the confines of "letting die," had it not been for the fact that those victims had been killed outright in the initial collapse.

> **e)** The implicit traditional view is that killing and letting die differ morally only if, other things equal between them, one of the terms has definitional properties that have moral significance (sometimes or always) *and* these properties are never present in an instance of the other term. (The obvious factor here is creating an original cause of death, which is definitionally true of killing.) (Kamm, 1993, p. 33)

5. As noted above the "original cause of death" was entirely due to the actions of the terrorists.

e.   *Philosophy and Discontinuing Non-Futile Use of a Scarce Resource*

As noted previously, the ratio of rescuers to the potential number of victims at the time the chief made his decision would have permitted him to consider the rescuers as being 'scarce." This would have been further justified by the nature and type of operations at the scene that would be required in the days, weeks, and months to come. The futility or non-futility of any such efforts was an unknown at the time of the decision.

An array of observations from philosophy on the discontinuance of use of resources is demonstrated below:

> **a)** It is not stopping [rescue efforts] per se, even when we know this will prevent some future improvement, that seems morally significant relative to not starting [rescue efforts]. What seems morally significant is stopping an improvement in the [victims] condition that has already occurred by stopping what was already being done to achieve it. (Kamm, 2002, p. 375) [It must be noted that no victim's condition was being improved in the evacuation zone at the time of the order.]

1. It is important to note that no active "rescue" operation (i.e., no one had been found alive in the debris) was under way at the time of the evacuation order. However, there was an extensive search operation, which is distinct from an ongoing rescue attempt. Had there been a rescue effort ongoing, it would have created a different level of importance and propriety in the decision-making process to evacuate the site.

The chief registered his awareness of this point when he noted that his decision would have been a much more complex one had there been live victims located and an ongoing rescue attempt being made within the evacuation zone.

> **b)** Why then may [the chief] not stop the aid once started, in order to help others more, if the [victim] will be no worse off overall and being in the [rescue effort]

> gave him a chance? Must the fact that the [victim] gets worse again through failure to continue what has already been done be definitive? I suggest not. (Kamm, 2002, p. 376)

2. The decision made to evacuate therefore meant that none of the people already victimized by the terrorists would have been any "worse off" than they already were due to the attack. Conversely, had they not been ordered to evacuate, the same reasoning would inversely apply to the rescuers. In essence, this is an application of the traditional "triage" process.

> **c)** On the assumption that there are now always additional urgent cases who could reach a normality, and that it is not always wrong to stop or not start treating the most urgent to confront us, we should drop those who are urgent but have only moderate outcomes after [a period of effort] so as to search for those who are now urgent and who will achieve normality (as long as the probability of finding these is sufficiently high and sufficient good is done in the interval of the search). (Kamm, 2002, p. 387)

3. The rescuers were in a normal state, but whose condition certainly would have been made worse in the event of an additional collapse, thus, urgently seeing to it that they were removed from the a potential hazard in order to maintain that normal state was preferential to continuing the search for other victims, who were not in their normal condition.

> ### f. Philosophy and the Person as an End-in-Itself, and the Significance of Status

At the time the chief had to make the decision to evacuate the collapse zone, he was presented with two competing status groups 1) the victims who had been

harmed and were in need of rescue, and 2) the rescuers who had not been harmed but were in need of protection from a life threatening condition.

Philosophy notes the following relative to status in this type of situation:

a) ...there may be a right to have one's life saved, but it is a less stringent right than the right not to be killed. (Kamm, 1992, p. 366)

1. The ongoing search for the original victims was clearly a reflection of the right of those individuals to be saved, whenever and wherever such a thing might have become possible. However, the rescuers also had that same right to life, and in the circumstances that were presented at the time of the decision, the rescuers right not to be killed too would naturally have been given precedence, particularly since it was entirely plausible that many of the people for whom they were searching had, in all probability, already been killed.

g.   *Philosophy and Harming Some to Save the Others*

The other disciplines note that there are occasionally undesirable cause and effect relationships between harming and saving.

It has been noted previously that there have been no suggestions being made that harm was being caused to the victims by the emergency services. All the harm that existed was created by the terrorists. There is, however, the possibility that had any victims been found in the collapse zone prior to the evacuation order, the emergency services would have had to decide about permitting the harm to continue in order to save others.

a) ...if actively *causing* a death that is not intended, but merely foreseen to be a side effect of the means used to save [others] is not permissible, it would follow that just passing by a dying person on the way to saving the [others] should also be impermissible. But this makes it impossible ever to save some rather than others in situations where we cannot save everyone ... (Kamm, 1989, p. 232)

1. The chief's intent can clearly be seen as one of bringing good to the rescuers, i.e., saving them from injury and death that would be a certain outcome if left

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to operate in the collapse zone. Those victims who were already in the site had had a cause of death already inflicted on them. The chief was clearly attempting "to save some" in a situation where it was no longer possible to "save everyone."

> **b)** When the lesser harm is a side effect of the greater good, the greater good does not occur *by* way of the lesser harm to others, according to the analysis of "by" provided by the [principle]. In these cases what we do, -- or any other event that helps to cause a greater good – is more directly related to the greater good than to the harm, since the greater good is either the direct cause or the indirect cause of the lesser harm. (Kamm, 1989, p. 235)

2. Any potential "harm" that would have ensued from the evacuation order would have been a "side effect" of the original intention, which was purely one of seeing to the good of the rescuers. Thus, the pre-existing condition of the victims already being harmed was not a direct result of the chief's well intentioned decision about the status of the rescuers.

> **c)** ... it is permissible to act with the intention that the lesser harm occur as a way of *maintaining the greater good* already achieved. (Kamm, 1989, p. 240)

3. Conversely to the above, the good outcome of keeping the rescuers alive was a direct result of the chief's decision.

> **d)** (1) It is acceptable that greater good have lesser harm as one of its aspects or as its direct or indirect effect. (2) It is permissible that a mere means to a greater good have (a) lesser harm as an indirect effect, if it has greater good as a direct effect or as an indirect effect achieved by a causal route independent of the lesser harm, or (b) lesser harm has a direct effect, if it has greater good as a direct effect.(c) lesser harm as its aspect, if it has greater good as its aspect also ... (Kamm, 1989, p. 242)

4. Although it is not possible to claim that any "lesser harm" was an aspect of the chief's decision, there was clearly a "greater good" that came to the rescuers as a result of the decision. Thus, even if "lesser harm" had come from the decision it would have been acceptable.

h.   *Philosophy and the Duty to Rescue*

The chief's decision to evacuate the collapse zone clearly was a response to his duty to rescue people, in this case, the rescuers themselves. He had already responded to that duty in regards to any victims that may have been in the original debris pile, as is evidenced by the fact that the very people he had to order to evacuate were already engaged in search efforts. Thus, the chief was making a decision about both simultaneous and superseding rescue duties. It is important to remember that the issue of "distance" between the victim and the rescuer is not just one of proximity, but also of time. Those who the chief could order evacuated were immediately accessible, whereas any trapped victims (although none had been found at that time) would have taken an extensive period of time to release. Hence, they could be thought of as temporally "distant."

Philosophy sums up this mixture of issues surrounding the duty to rescue as follows:

> **a)** For when costs to reach or to aid people are high and people with whom one is not interdependent ("strangers") are involved (even when all other factors are equal), we may have a duty to pay the costs only for those who are near. (Kamm, 2000, p. 9) [The cost being paid to rescue those who were near was the cessation of the victim searches.]

1. There was a duty on the part of the emergency services to aid, assist, and rescue the victims at the World Trade Center, and that is exactly what the rescuers were attempting to do when the evacuation decision needed to be made. The "cost" of making this decision meant that the search effort would have had to be suspended until the safety condition in the collapse zone stabilized. Given the duty of the fire department, this was indeed a substantial cost. The chief was near to the rescuers in the sense that he had immediate access to them, whereas the conditions across the site prevented him from being "near" the original victims. Leaving the rescuers to work under the additional collapse threat could have resulted in an additional "cost" that would have been unacceptable. He accepted the existing cost and made a decision that gave aid to the near.

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2. Bio-Ethics and Ethical Values

There is no question that the decision to pause the rescue efforts due to the additional threat of building collapse required an ethical assessment between the lives of the current victims and the lives of potential victims.

The discipline of bio-ethics offers a corollary of issues found in the treatment of pandemic patients:

> **a)** ... authorities faced hard choices in deciding which ... services to maintain and which to place on hold. They had to weigh risks, benefits and opportunity costs. It is necessary for such hard decisions to be made in a fair manner, including the appropriate access to limited resources. There needs to be equity between [victims and rescuers]….In the case of [a threat] it is important to control the spread of the [threat], but as much attention should be paid to the rights of the non-[injured] who need urgent [attention]. (University of Toronto Joint Center for Bioethics, p. 24)

1. The chief had to weigh the impact of the threat related decision he was making on both the rescuers and the victims. Whereas he could not control the threat (the potential collapse of the building), he could affect the risk it represented to the rescuers by removing them from the threat. Their need for urgent attention was obvious, and his decision addressed and reflected that urgency.

> **b)** While [emergency] professionals have a duty to care for the [victims], this must be tempered by a duty to care for themselves in order to remain well enough to be able carry out their duties. To extend the analogy introduced above, the firemen would not knowingly jump into a burning inferno. Where to draw the line between role-related professional responsibilities and undue risk is a question [we] ... did not fully resolve. (University of Toronto Joint Center for Bioethics, p. 8)

2. Ensuring their safety had a future beneficial effect on both the rescuers themselves and on any potential victims, inasmuch as the capabilities and talent resident in the saved rescuers could be brought to bear on the overall site conditions. Removing the rescuers from the site enabled them to "remain well enough to be able to carry out their duties."

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3. Theology

a. Theology and Death as a Side Effect

At the time the chief made his decision, he had no information to indicate that any victims in the original debris pile were alive, had been located, or would have been left on their own because of the evacuation order. Conversely, he did have information that large numbers of rescuers would be in a life threatened situation by remaining within the collapse zone of Seven World Trade Center. Based on experience, one might have been able to presume that there may have been victims within the evacuation zone, but presumption can never be equated to fact. The chief had to address the facts and the predominance of evidence that had been brought to his attention.

Theology addresses certain aspects of morality that could attach to the decision factors and outcomes that the chief was addressing, as noted in the following examples:

> **a)** ...if one knowingly brings about someone's death as a side effect, one is not responsible for *intentional* killing if one neither wants the death nor chooses to kill. (Grisez, 1993, p. 482)

1. It can be argued that the chief had a responsibility to protect the lives of his personnel and the other rescuers operating at the scene of the collapse, and that in fact, not addressing that responsibility would have carried a moral burden with it. It was death and additional killing that he was trying to avoid. His decision had no intention of causing or bringing harm to any of the rescuers or victims at the scene, and while there is absolutely no indication that any death occurred due to his decision, had such a thing happened, it would have been a direct result of the terrorist actions rather than his.

> **b)** It is always wrong to accept one's own or another's death that's a side effect of doing something that would be wrong in any case. (Grisez, 1993, p. 482)

2. The chief's decision was clearly one of the rejecting rather than accepting death for anyone.

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c) *Accepting death as a side effect* means making and carrying out a choice to do something other than kill and with a purpose other than death, but with the

expectation that a death, one's own or another's, will result. ***Risking death as a side effect*** is similar, but the expectation is that someone's death might result. (Grisez, 1993, p. 482)

3. The chief's actions can clearly be seen as being in accordance with his moral responsibility towards his rescuers and "carrying out a choice" to save their lives. Any "side effect" of other outcomes that might have happened would have been a "risking death" circumstance as understood and described by the theologians:

d) Sometimes one's responsibilities to others make it clear that it is unfair to accept the risk of death to them or even to one's self.... High public officials whose death would be detrimental to the common good take unfair risks if they evade [measures to secure their lives]. (Grisez, 1993, p. 486)

4. Leaving the rescuers in the new collapse zone would have been a case of "unfair risks" to them and in their loss would certainly have been "detrimental to the common good."

b.   Theology and the Principle of Double Effect

As alluded to above, the decision to evacuate the collapse zone had two potential outcomes: the first was the intended one of saving of the rescuers lives, and another possible outcome was that of leaving victims possibly trapped in the rubble without aid.

The direct and indirect results of the above described decision purposes are directly related to the types of events envisioned in the theological Principle of Double Effect:

a) ... the Principle of Double Effect... starts out with the idea that your initial action has to be itself a good action or what they call a morally indifferent action, and that action is seen as having two effects.... The second criterion after you have the performance of this morally indifferent or good act, it has to be that your intention is also to achieve the good end

and not what is called the bad end or the evil, so the intended effect is called the direct effect and what happens in terms of the evil effect is only permitted or tolerated but not intended. The third criterion is that the evil effect cannot be the result of the good effect. So in other words, the good and the bad have to arrive simultaneously as a result of the first action that you take and then the last criterion is that there has to be a proportion agreed for initiating that good or indifferent act in the first place. (V. Genovesi, personal communication, 2008)

1. The chief's order to evacuate the collapse zone clearly had an "intention" to achieve the good of saving the lives of the rescuers; any other outcome was not intended. The "evil effect" that was present at the World Trade Center site was entirely a consequence of the acts of the terrorists.

VII. DECISION MAKING

This thesis has examined the observations of multiple and varied disciplines concerning matters involving issues of life and death. Much of what has been looked at is derived from the moral core concerns and influences that would naturally surround such events. A significant amount of the discussion has been conducted in an abstract, intellectual, and academic environment where such discussions and debates can be exchanged freely without an actual cost in lives being expended. It is this free exchange of discussion about the circumstances, conditions, and cultural drivers that serve to expand knowledge in this most important realm.

This thesis has also examined a series of events and circumstances that are as far removed from that abstract world first analyzed as it is possible to travel. The real-life experiences that were described were examples of life and death situations that were completely devoid of the luxury of detachment that was reviewed in the earlier examples from the other disciplines. These were actual situations where some people would live, some people would die, and decisions were made with that understanding.

The chasm between these views of the same issue is not new. In 2002, the National Science Foundation convened a workshop, "Integrated Research in Risk Analysis and Decision Making in a Democratic Society." One of the participants described this chasm:

> ...the field appears focused on serving the needs of policymakers and analysts, to the exclusion of those with line responsibilities either in anticipation or in response to disasters. The other notable bias is that risk analysis and its brethren receive far more attention than decision making, which I think of as the place where "the rubber hits the road" ….My first, perhaps naïve, suggestion would be to make sure that we take a broader view to include others. In my conception, decision makers fall into two major categories:
>
> 1. Those who set policy in a relatively static world, where there is time to do careful analyses, subject decisions to public and political processes, and fine-tune them based on experience, if any.

2. Those who are "on-line" in trying to anticipate, react to, rescue the victims of, and restore infrastructure in the wake of potential or actual disasters. This is

probably a much larger community, many of whose members may not even know that they will play such roles until a disaster happens. (National Science Foundation, 2002, p. 77)

What should be evident at this juncture, though, are not the extreme differences noted above, but rather the leitmotif that runs continuously as an undercurrent throughout both the abstract discussions and the operational scenarios. What each is fully involved with is decision making. The philosopher, theologian, ethicist, etc. are each describing the various factors and conditions that permit or tolerate loss of life when an individual has to make a decision relating to the possibility or probability of that loss. The fire chiefs, completely removed from an academic discussion, but fully immersed in a life-threatening crisis, have given insight into the various factors and conditions that contribute to both the saving and the loss of life when such a decision has to be made. It is that decision process that actually places all these disciplines in immediate proximity with each other, rather than at opposite ends of the academic/operational spectrum. It is important to note, however, that that proximity is rarely, if ever, recognized by the individual participants in those disciplines.

While some decisions concerning the continuance of life can be made at a pace that permits and, in fact, encourages a deliberative process, such as with the CDC pandemic vaccine distribution plan, it is probably more commonly experienced in crisis circumstances that do not allow for deliberative opportunities. In both of these types of activities, however, the decision makers do share an observer status, albeit with great differences in distance from, and personal involvement in, the crisis, but it is only through their ability to observe under these varying conditions and influences that permit them the wherewithal to make the necessary decisions. For example, it would be unreasonable to expect those whose lives might be lost to be a neutral and reasoned observer concerning that possibility. The ability to be an observer of the condition, to absorb, and consider all the issues, whether it is something in the distant future that may

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not actually ever occur (as with the vaccination plan), or a situation that the decision maker is seeing, hearing and experiencing at the moment, would still appear to be a mandatory requirement for making such a decision. The ability to take stock of a situation and remain distinct from it long enough to weigh the known facts and conditions is a major requirement of the decision maker. Developing and maintaining that observer status is a pivotal contributor to creating a substantive outcome.

A.   THREAT AND RISK

Where risk is a balance point between "vulnerability" and "consequence," the decision maker must first have awareness of the threat that creates the life-threatening situation. If there is vulnerability for individuals involved in a circumstance that could result in a life-threatening situation, then there is a threat and risk condition that will require a Considered Risk Casualty decision. For the sake of this discussion this thesis will always presume the consequence to be death rather than injury alone. As seen in the described scenarios, vulnerabilities can vary significantly in response to a single threat, to multiple threats of different types, to multiple threats for a single group, to single or multiple threats to different groups simultaneously, and even to a group who, having died, moved beyond both threat and vulnerability, but whose situation can continue to have consequences for other groups. Naturally, the higher the level of vulnerability and/or consequence, the higher the level of risk involved. It is the realization and understanding of that level of risk, or its continuing increase, that brings the decision maker to a point of having to make a Considered Risk Casualty decision. What the decision maker may not immediately comprehend is that there is also an inherent risk for themselves with regards to any subsequent review of the need for their decisions in these situations. Even when that is understood, however, it remains the ability of the individual to move beyond that and other concerns and to make the decision in a timely manner that reduces the threat to all concerned.

Clearly, such decisions are among the most important that any individual can make, or as so succinctly stated by Chief Cruthers, "You risk little to save little, and risk more to save a lot, and the most important thing you can save is a life" (F. Cruthers,

personal communication, 22 January, 2008). The basis of the Considered Risk Casualty decisions in each of the scenarios examined were not made with the benefit of complete data, confirmed factual information, or multi-discipline observations and input. It might be proposed that the above described decisions were made in moments of intuition, but intuition is generally not explicable in subsequent analysis; that is to say it is not a derivative moment. Each of the chiefs in interview was able to describe the facts they weighed in reaching their decisions in the above scenarios. They may have been able to analyze the conditions so rapidly that it appeared intuitive, but that, in fact, was not the case. The decisions were made on the basis of vast professional experience.

1.   Factors Considered

a.   Similar Factors

Just as risk and experience are variables, so are the dynamic influences and conditions under which these decisions are made. Some factors in the scenarios appear to be constant, or indeed, must be constant, such as the threat to life, but there were others involved that are worthy of note due to the nature of the impact they can have on the decision maker. Some of those factors are as follows:

1).   Time. The time factor can be either elapsed, anticipated, or both simultaneously. For Chief McNamee, the amount of time that had elapsed since the trapped firefighters had first gotten into distress was a major factor influencing his decision. The longer that time continued, the less likely it was that those firefighters would have been found alive. Simultaneously, the more time that fire had to advance, the greater the risk it was to the lives of his remaining firefighters.

For Chief Cruthers, the more time that the fire in the remaining tower had to burn, the closer was the possibility of a collapse, thereby increasing the threat to his firefighters. Conversely, the more time the rescuers were away from their search duties, the greater was the possibility that if other victims had remained alive, that they could have succumbed to their existing condition.

2)   Distance. Distance is not just a matter of linear proximity but also one of time. A short, actual distance can take a substantial amount of time to traverse due to obstacles created by a threat such as fire, smoke, debris, etc. Distance can also equate to a change in the level of threat.

For Chief Dunn, the closer his firefighters got to the gunman, the greater the risk to their lives became. Conversely, the further away from the fire the firefighters moved, the greater the risk to the hostages from the fire.

For Chief Cruthers, the greater the distance from the remaining tower the firefighters and other rescuers moved, the more their chances of survival increased. Conversely, the further away from the search area they were, the less the chance for creating victim rescue or recovery opportunities.

3)   Threat. A threat condition can impact all individuals at a scene equally, but addressing the threat when there are different categories of individuals can impact those groups in distinctly opposite ways.

Chief Dunn encountered two separate threats simultaneously, but he had the capacity to address only one of them. By addressing the fire, he was reducing that threat to the hostages but increasing the vulnerability of the firefighters to the gunman. Conversely, by responding to the threat presented by the gunman to the firefighters, he was increasing the threat to the hostages presented by the fire.

Chief McNamee also had two categories of individuals for which he had to make a decision: the trapped firefighters and the rescuers. However, the factor of time had overridden and concluded the threat for one of these groups, the trapped firefighters, which enabled him to focus all his attention on the surviving rescue personnel.

Chief Cruthers was faced with a situation wherein the initial threat had seemingly passed, only to be replaced by an additional but similar threat.   The two groups that he was concerned about would be unequally impacted by this new threat. If the group that had become victims of the first threat were subsequently impacted by the second one, (given the magnitude of the first threat and its results), the condition of those

initial victims in all probability would not have been changed. On the other hand, the rescuers who had survived the first threat could easily be killed by the second one.

b. *Standard Operating Procedures*

Planned and practiced response patterns by homeland security entities can be of dubious benefit in these circumstances. They can increase the risk to personnel, but they can also contribute to risk reduction.

For Chief Dunn, the personnel under his command were proceeding according to established operating methods when they moved into the building to attack the fire, but it increased their risk from a source that had not been in their normal problem/solution process. It was the chief's ability to recognize the difference between those two conflicting issues that bought him to the point of making a Considered Risk Casualty decision.

In the Massachusetts warehouse fire, the standard and completely necessary practice of committing personnel to search for trapped people in a fire contributed to the dimensions of the loss. Chief McNamee's ability to recognize that continuing to increase the commitment of personnel, according to a plan designed for routine situations, was no longer applicable in a crisis setting and was what saved the lives of the remaining firefighters. Conversely, it was that same commitment to standard practice that caused the resistance from the remaining firefighters to his order ending rescue operations. Only when those personnel understood the novelty of the circumstance in the same way the chief did their resistance to the order stop.

At the World Trade Center, the magnitude of the disaster was such that there was no existing procedure or plan anywhere that could have addressed the actual situation. It was, however, the ability of Chief Cruthers and his staff to rely on the model of past events and procedures that gave him the means to not only make the decision, but to have the directive carried out successfully.

c. *Different Factors*

As described in the scenarios, it is possible to see how there were also a number of different factors present in each of the situations that were modified or not present in the other circumstances.

Chief Dunn had multiple overlapping threats, for which the solutions would have created inverse cause and effect outcomes for the hostages and firefighters, even though there were only a few unknown factors that needed to be considered in his decision making. Also different from the other scenarios, he had no ability to address one of the threats, (the gunman, which was a law enforcement matter rather than a fire department issue), and his decision did not create a negative reaction among the firefighters.

The items that made the warehouse fire different from the other incidents were that Chief McNamee had a singular threat for which he had the required resources and ability to address. His response to the threat followed protocol which was one of increasing commitment to meet an increasing threat, which was a process that the subsequent conditions later caused him to reject. The outcome was that the decision he made caused recalcitrance and resistance, albeit briefly, among his personnel Chief Cruthers was presented with a disaster of unprecedented scale that was caused by an intentional act. The resources and ability to address an event of such magnitude was beyond the capacity of any existing plans or emergency service to fully address. The unknown circumstances that he would have had to consider far surpassed the facts that he had available to him, and they could not be determined in the amount of time that he had available before having to make a decision about a new and growing threat.

The National Science Foundation spoke to all of these dynamics thusly:

> ...decision analysis seeks out the diverse views of interested and affected stakeholders. It attempts to assess the probabilities associated with all the outcomes believed to be important, and assigns values to those outcomes in ways that can be sensitive to equity, personal control, catastrophic losses, or other factors deemed important by the affected parties.

...whereas risk analysis often strives for some magic number that defines an "acceptable risk," decision analysis recognizes that there is no universally acceptable level of risk. In decision analysis, acceptable risk depends upon the problem context and can be understood only in association with the management option at its best in a particular context. In other words, acceptable risk is decision driven: as the decision changes, so too will the magnitude of the risk that is acceptable (that is, the probabilities, consequences, etc. that are acceptable). (National Science Foundation, 2002, p. 73)

The process of making these decisions is not unlike that of a battlefield commander in war: "It is sometimes work just like that on the battlefield, with conclusions reached many times more often by informed judgment than by precise analysis." (Franks, 1996, p. 11)

How that is achieved in battle is insightfully described this way:

For some, especially those commanders at battalion level and below, it means seeing, listening, roughly imagining what you cannot immediately see and then deciding – and sometimes in nanoseconds, sometimes without much consultation. For senior tactical commanders, it means doing a lot of listening, gathering information and seeing what is going on in the present but having the discipline to remain detached enough to imagine or forecast the future or what you cannot see. Senior commanders deal more with what they can imagine and what they *cannot* see. (Franks, 1996, pp. 20, 21)

The corollary to the decision-making process of the above fire chiefs is unmistakable, particularly the requirement to "remain detached."

In the above factors and circumstances, one sees how great the variables created in the aggregate can be to both the vulnerability and consequence aspects of risk, as well as the factors that are included in the decision process and eventual outcomes. It is this ever changing status of threat, risk, and factors matrix that is a defining aspect of Considered Risk Casualty situations and the decisions that such events demand.

B.   EXPERIENCE

In each of the homeland security events that were reviewed with regards to their decision-making conditions, it is clear that there is a highly complex, interrelated mix of

factors that compete for prominence in any Considered Risk Casualty situation. The fact that lives can be saved or lost on the basis of these decisions should mean that each of the factors is carefully weighed and considered according to its hierarchy of importance. Unfortunately, the urgency of these scenarios indicates that the time available to give the appropriate attention to each and all these details is a luxury that is simply never going to be available to the decision maker. At least, that is how the circumstance appears in an initial examination. The opposite is in fact the truth. It is actually a question of how much time is actually required to give "appropriate attention" to each of these factors. It appears that with experience, the time requirement is remarkably short or as described above by the military, "nanoseconds."

A factor that was similar in each of these scenarios, but was not noted above, is that of the experience level of the decision makers. Each of the chiefs involved in these events had decades of experience and were among the most veteran officers in their departments. That experience enabled them to gather, absorb, and evaluate the factors and the cause-and-effect probabilities that all their years of responding to emergencies could bring to the decision-making process. That experience level was so great that it gave them the ability to establish an information hierarchy matrix not only as to the importance of the facts, but also for the probability of factors whose exact status was unknown or unknowable in the conditions under which they were operating. Additionally, their professional experience gave them the ability to foresee the cause-and-effect relationships of each of those individual factors in comparison to each other. It likewise enabled them to do all of these things at a speed so great, again, "nanoseconds," that they did not always realize themselves that they were processing this information. Two of them described the time necessary to build and evaluate this matrix as a "moment," and the other chief described the process as "simplistic." It was only through subsequent discussion that the complexity of the process that they were involved in became known to and realized by them. There were at least twenty-five independent and often conflicting factors in just one segment of the overall problem matrix in the decision described as "simplistic." That decision included the following factors:

a)   The ongoing search for their fellow firefighters, police officers etc.

b)   The viability of the victims.

c)   The likelihood of success.

d)   The nature of the hazard.

e)   The potential cost of the effort.

f)   The proximity to the victims.

g)   The magnitude of the scene.

h)   The collapses that had already occurred.

i)   The anticipated collapse of Seven World Trade Center.

j)   The extreme number of lives that were in danger.

k)   The guiding factors learned in previous events were applicable at this scene.

l)   He had to do everything possible to not lose more lives.

m)   Dangerous activities would need to be undertaken in the current search condition.

n)   If there is no life to be saved, you don't risk life.

o)   The ongoing fire condition across the site.

p)   The FDNY experience in creating collapse zones.

q)   The FDNY experiencing withdrawing units from firefighting operations.

r)   The FDNY experience in retreating to exterior operating positions.

s)   The FDNY ability to continue to fight fires from outside positions.

t)   The FDNY experience in enlarging or shrinking zones of operation.

u)   The FDNY Officers and firefighters had experience in the above fire ground operations.

v)   The size of the structure in danger of collapse.

w) He needed to differentiate between what is worth saving (lives) and protecting (property).

x) The experience of the firefighters was being applied in a condition that it was exceptionally more dangerous and greater in size than they had ever experienced previously.

y) He had available to him the collective experience of many other chief officers that he had known and worked with for years. (F. Cruthers, personal communication, 1 August, 2008)

This type of thought process was noted in the National Science Foundation workshop as:

> ...besides risk analysis (and its close relative, decision analysis), we have another mode of thinking that is essential for rational decisions in the face of danger. This is the experiential mode.... Experiential thinking is intuitive, automatic, and fast. It relies on images and associations, linked by experience to emotions and effect (feelings that something is good or bad). (National Science Foundation, 2002, p. 72)

The connecting and key element in this statement is the reference to experience and, as noted previously in many homeland security events that may result in serious injury or death, the conditions that lead to that possibility arise quickly and early-on in the development of a crisis. It is during that developmental stage that the first responders are most likely to be present, and it is also the time when the most senior and experienced decision-making personnel are least likely to have arrived at the crisis scene.

Of all the drivers influencing outcomes in Considered Risk Casualty decision-making instances, none has more impact in the selection of the solution chosen then does the experience of the decision maker. In that experience there exists both the strength and the weakness in Considered Risk Casualty situations. In short, in order to improve, if not ensure the best outcomes in Considered Risk Casualty situations, it would be beneficial to increase the experience base of those individuals who may be tasked with making life and death decisions in homeland security events. The pivotal question is how to create the benefits derived by experience for those who have not yet acquired that experience.

However, it is not just any experience in Considered Risk Casualty incidents that is universally valuable; the worth and credibility of the experience is situational specific as revealed in the following.

Both the fire service and the military have vast experience in making these types of decisions and with almost instinctive action, as seen in the above, will respond to save their own, even to putting their own lives at risk to do so. At the Pentagon on September 11, 2001, in spite of the raging fires, members of the military made numerous entries into the destroyed parts of the building to search for and rescue those trapped inside. As the fire service presence increased at the scene, they commenced searching as part of their duty, and quickly recognized, based on their experience that the conditions had become untenable for further searches. The military personnel, though having abundant experience in operating in life threatening conditions, had no experience in doing so in infernos and, therefore, failed to realize that the time for further rescue efforts had passed. This dichotomy of experience created at least one incident of altercation between representatives of the military and the fire service before fire-ground control was established (Creed and Newman, 2008, p. 144) This incident strongly indicates that Considered Risk Casualty decision-making experience must also be viewed and evaluated within its developmental realm to be fully applicable in times of crisis. This does not mean that decision making can only be credible within the field of the decision maker, but it does dramatically point out the need for acquiring experience based education across a wide range of disciplines in order to meet the current and future homeland security conditions that can occur.

C.   THE MILITARY

At the start of this paper the author discussed the traditional military experience of expending personnel and materiel in order to attain a particular objective in warfare. That process is understood in a loosely defined concept referred to as "Acceptable Losses." Given the volume of such instances, it would be normal to anticipate that a metric exists within the military for determining the number and type of losses that would be "acceptable" for an objective of a particular type, size, or importance, but this is not

the case. This was stated quite clearly and noted previously as: "Just War moral principles and doctrine provided few, if any, specific guidelines to help military decision makers value and weigh alternative choices in the very chaotic environment of war" (Roblyer, 2005, p. 10). Even at the individual decision maker's level the search for such a metric would be pointless as noted during an interview at West Point, "...that scale doesn't exist other than in the commanders considered judgment" (B. Imiola, personal communication, 19 May, 2008).

The only recognition given to the search for a metric that might be of assistance to the decision maker is summed up with the word "proportionality," which is taken to mean an inexact equation between the "costs" and the "objective" or the gain anticipated and/or achieved. In the military, it is stated as a legal understanding that "Proportionality requires that any incidental civilian injury or damage to civilian property arising from such an attack be proportional to the military advantage anticipated" (Stephens and Lewis, 2005, p. 4). Clearly, this leaves one without a defined calculus in times of crisis. However, it is just as clear that the vast military experience with this problem must place its reliance for these decisions somewhere. It appears that place is with the on-scene commander. In reference to this issue, in the Geneva Conventions it has been described as: "When incorporated into operable rules of engagement, difficult choices need to be made, choices that vigorously test the limits of the concepts. Kennedy correctly observes that commanders will often conclude that it is a 'judgment call' [49]..." (Stephens and Lewis, 2005, p. 5).

There is no shortage of observations and analysis throughout the military field that continue to repeat citations about a commander's judgment in determining exactly what the portions are in the factor of "proportionality" when discussing "acceptable losses." A continuing legal analysis of this focus states, "The principle of proportionality necessarily requires that 'value judgments' should be made as to the respective worth of attaining military objectives against the cost of securing such an objective [124]" (Stephens and Lewis, 2005, p. 11). These repeated references to "judgment" and "values" seems to push the decision-making process further from definable standards and into an area that is not only nebulous, but since it is dependent on the individual, could be

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expected to be dramatically different from decision maker to decision maker. This would then seem to beg the question if there is a discernible criteria available within "judgment," if not proportionality per se. Unexpectedly, the military experience seems to suggest that the structuring of values is more discernible and developmental than any criteria for proportionality,

> The modern commander is compelled to weigh the loss of all lives (enemy, civilian and own forces) when planning an attack and, under the prevailing law, must apply requisite values to both lives and military objectives when deciding whether the proposed attack meets the proportionality criteria. These values are shaped by both the cultural background of the officer as well as the significance of the military objective and the broad cost of securing it. [119]" (Stephens and Lewis, 2005, p. 11)

This is re-emphasized as "To the extent that decisions concerning target selection under the principle of proportionality are based upon value judgments, it will necessarily reflect the values of the military commander making those judgments" (Stephens and Lewis, 2005, p. 12).

Even though legal in nature, the above observations might be thought of as distinct from the operational issues, but again that is not the case. Military field commanders not only accept the "value" based standard for determining proportionality and acceptable losses but also suggest how such a value system is created and applied:

> It is also the moral dimensions of accumulated individual decisions that perhaps register the most clearly in any determination of the overall morality of an organization – or a country.... the people of the United States desire a military that strives to attain the highest moral standards, and military members involved in the targeting decision process deserve the best moral preparation and decision making tools their nation can provide.
>
> …This process description is followed by considerations from the fields of applied ethics and decision analysis as they pertain to identifying possible issues in the decision support provided to military members who must make very difficult moral judgments in the targeting process. (Roblyer, 2005, p. 2)

Although this statement is a direct reference to the full range of other discipline observations examined, it is clear that this is obviously not an abstract issue for the military, but rather a true operational objective that has been considered and evaluated over many years in numerous combat operations. They have manifestly concluded that "acceptable loss" decision situations ultimately come to rest with an individual commander or decision maker on whom they rely to have the appropriate system of values necessary to make the requisite decisions under these conditions, "...I think that when we go to complex situations where there are a wide variety of factors and perhaps imperatives that are included in there, it's going to come down to that considered judgment." (B. Imiola, personal communiation, 19 May, 2008)

Accepting this, it is then reasonable to inquire about the genesis of such a value system and whether or not that can be inculcated and/or enhanced to provide some repeatable dependability to these most critical decision moments. West Point has also considered this issue:

> Clearly people who enter into the military already come in with a world view of their own. We all come in with our worldview shaped by our culture, and our parents, and our religion, or whatever other things we believe in…I think the model of the Army and certainly here at the Academy is an Aristotelian model where we come in, we're taught certain things, were taught that these things are good, and these things are bad, these values are good values, these virtues are good virtues, these are vices rather than virtues, and having taught them we habitualize them and then we practice them and we do them through habit, they're reinforced for us and finally...we internalize those values and those virtues so when faced with a situation like that, a person of good character, which we hope as officers and gentlemen we'd all be, would then…understand and know what to do…In the Army I think we like to think more in terms of that person's good character being in the forefront and…understanding what to do…so I think in that case what comes to the forefront is the person's training, experience and character and the hope that that person is a good person, and a moral person, and does the right thing, and makes the right decisions. (B. Imiola, personal communication, 19 May, 2008)

From the above observations, it is obvious that the military experience demonstrates that an individual's values and character can be developed through a program that provides education and opportunities to test those abstract elements by which an individual's morals and cultural standards are recognized and understood.

However, it is in the application of those values that the test of the decision maker resides. The military also has observations on that:

> ...I think that we would find that in a profession over time, the profession will narrow that possible range of responses down where, for example, you and I with perhaps completely different backgrounds, two people with completely different backgrounds, given to make a decision about the same thing might very well lead to completely different outcomes and different responses. However, someone in a profession with a professional ethic, and a training program, and a common set of values and virtues, even if it's mere training, I think that will become a drastically narrowed down ... possible range of responses. So rather than see a response that's going to be from A to Z you might narrow it down to a response from H to J…I think there would be much more in common rather than differences because of the experience and the profession. (B. Imiola, personal communication, 19, May, 2008)

Battlefield commanders, the decision makers themselves, have also endorsed this concept:

> The combination of the pressures and high stakes of the wartime decision environment, the moral – legal tensions and resulting conflicts, and the well-trained, but fallible, human beings making the decisions are unavoidable factors. It is precisely because these factors are inescapable that the human decision makers deserve the highest quality decision support that can be made available to them. (Roblyer, 2005, p. 30)

They have also commented on a suggested source that would inform such an educational support program designed to create and establish the structure upon which life and death decisions can be made:

> Principles and cautions from ethics and judgment and decision making provide different and important lenses through which to view the very difficult issues posed in the targeting process. More fully incorporating those concepts may contribute to better moral preparation of United States military decision makers and, in the final analysis, may contribute to making wars of the future less costly in terms of innocent lives. (Roblyer, 2005, p. 35)

The decision maker in battle takes these ethical experience concepts that through education have been "internalized" into values and combines them with personal experience to become a decision-making ability and talent described as:

They must see the present, imagine the future – both friendly and enemy – as it should be to accomplish the mission and then figure out the best way to get from one state to the other at least cost to their soldiers. They must see in their "mind's eye" what others cannot. That is where the long years of practice and study, plus information about the reality of the present, cause your intuitive senses to be able to see what others cannot. (Franks, 1996, p. 21)

In the civilian realm, one of the papers submitted to the National Science Foundation workshop concluded this way:

The world has always been a dangerous place and today's risks are certainly no less daunting than these of earlier eras. However the nature of these risks has definitely changed, posing unprecedented combinations of relatively high probability, catastrophic outcome's surrounded by vague knowledge and substantial uncertainties. Coping with such threats requires all the skills we can muster. This means tapping into the strengths of trained human judgment and intuition and integrating these *with formal methods of analysis.* (National Science Foundation, 2002, p. 74)

If one transposes the lessons learned from years, indeed centuries, of military events in "acceptable losses" issues to its parallel civilian homeland security concept of Considered Risk Casualties and combines it with the identification of effective and efficient examples of decision making from the civilian world, one is able to identify the two core educational requirements for decision makers, Those requirements are experience and moral values.

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VIII. CONCLUSIONS

A.   HOMELAND SECURITY ISSUES

Deciding who lives and who dies is a daunting responsibility. It is an element of very few professions, and even among them, the occasions on which it actually becomes a necessary and conscious decision can be rare moments. It is understandable how this rarity, when combined with the seriousness, magnitude, and finality of the consequences of such decisions, can also make them among the most difficult and remembered moments in a lifetime. Apparently, it is these very same factors that create a substantial amount of discomfort in discussing this topic, and at times just surfacing it for discussion.

These decisions take place across a wide spectrum of activities and conditions. It can be seen in the relatively abstract writing of plans to serve some future and distant event that may never occur and within which no defined recognition is given to the life and death consequences of the use of the plan. It is also recognizable in active, ongoing, and immediately urgent crisis and disaster situations. The scale of events under which these decisions are required are equally as broad, encompassing both a doctor's relationship to an individual patient and a head-of-state's decision concerning the use of nuclear weapons. Yet, throughout all of these circumstances there is no one identified calculus or metric that has been developed and applied for use during this decision-making process. That may be at least partially due to its complexity or to the reluctance to discuss this topic at all. However, it may also be a reflection of the seriousness with which society views this situation through tacitly recognizing that no metric would ever be sufficient to serve such a purpose.

These above factors result in a condition that leaves the homeland security executive and/or decision maker in a very isolated position. They are left essentially to their own devices to reach a solution that addresses the probability or actual death of an individual or large numbers of people. As seen throughout this thesis, these decisions are frequently made under circumstances that preclude having all the information and data that would assist in making such decisions, and frequently fall on the shoulders of a

single individual. Even as society does not provide a metric for these moments, it simultaneously expects that the decision-making individual will have all the capabilities, experience, and morality necessary to make a decision that is equal to the circumstances presented. For professions that routinely require decisions that are far less consequential than matters of life and death, society provides, and in many cases requires, that they be rigorously educated to adhere to a level of acceptable performance. As one can see from the above, even with professions and occupations where a level of expertise is required, that the fitness for, or ability to make life-and-death decisions may not be universally applied with equal rigor.

Enhancing that decision-making ability through an educational process focused on such moments would not only serve society as a whole, but it would also provide a means of filling that void created by the absence of a metric while simultaneously giving much needed support to the decision makers themselves. This concept was endorsed repeatedly during the research for this thesis across a number of different disciplines. For example, from the military:

> ...risk analysis tools…one way to think of them is a useful role in the training and development of members so that in real life those decisions can be made falling back on training and experience rather than necessarily a checklist ... thought processes may be a valuable educational piece of the training and development of knowledge and experience in professional leaders so that when it comes time to make these decisions, that's part of the background they can fall back on and then be able to make those decisions in light not only of their training experience but also in the other factors that are involved in that.

> …junior members who are much more inclined perhaps in times of crisis to fall back on their own personal beliefs, values, morals, upbringing, world view than the organizations. So I think that training them on perhaps talking about those other things but incorporating them underneath the umbrella of the organizational values might be perhaps a clear path for them to achieve the level that I would think we'd want them to have which would be either to habitualize or then eventually internalize those values so they can make those decisions... (B. Imiola, pesonnal comminication, 19 May, 2008)

From the emergency services:

Anything that causes firefighters to think about ... life and death and emergency situations ... from the theologians or the philosophers and from the terrorism experts ... is good information…. I want to know more about it. I think the fire service should know more about it. So I'm more about this theologian's views on life and death and philosophers so all that information will make us better decisions at the fire ground. (V. Dunn, personal communication, 26 June, 2008)

...if I sat down and went through one of these programs, if one were developed and I sat through one of these programs, I would most definitely be looking at it from a whole different angle than I would have prior to December 3, 1999, absolutely...everybody on the job at that time had not experienced a violent line of duty death….We had our deaths and things like that, but as far as violent fire ground line of duty deaths...it was not a reality. It was a concept. It was way in the back of our heads. We knew...it's a possibility, these things happen, but what our incident did was brought it right back in full view of our face, right in our face the reality of the things that we had kind of pushed into the back of our mind because nobody had experienced it on the job at that time. (M. McNamee, personal communication, 23 July, 2008)

I don't think something like this can be left…if you work intuitively, you're going to get a different answer every time…if you're going to deal intuitively, you're not even dealing with the same intuition each time so I think that's one thing I would dismiss, is that it be left to intuitive handling by whoever happens to be the on-duty commander who drew the short straw….Intuition. It's certainly a factor…but I don't think that can be **the** factor. (F. Cruthers, personal communication, 22 January, 2008)

From the theologian:

…are dealing with a population who will be involved in the decision-making process. What's the best way for them to learn? …we don't even ask the questions maybe because we don't know what the questions are, so it seems to be that whatever educational program was developed, it should begin with sensitizing people to knowing what the questions are that need to be asked. Then you start to figure out how do we get some answers? You know, you expose them to probably case studies and that kind of thing, scenarios that actually have happened or scenarios that are likely to occur... it is very practical, it's not overly theoretical or speculative…we would bring to the scenarios and case studies probably a combination of material, background material that you've been exposed to, to the

philosophers…there are principles that I think are pretty far ranging and pretty generally accepted as operative principles for what we have with some of these questions.

...I think it's safe to say generally that sound theological principles depend to a large extent on sound philosophical principles and now when you make the theological and moral decision, you can't do it apart from philosophy but you also can't do it in a vacuum that doesn't take into consideration what we might call empirical facts and the empirical facts are provided by an in-house ... social analysis, circumstantial analysis, or what have you, but you need to know the facts to make a moral decision and we begin with general acceptance of the position of the dignity of life and the obligation we have to preserve that, we do that within the context that is the real world and so you deal with it as best you can. (V. Genovesi, personal communicatin, 9 July, 2008)

I think it would be encouraged. We're talking about conscience, for example, you don't develop a conscience necessarily only by directly engaging in every type of virtue and/or wrongdoing yourself. You can also learn from examples. You can learn from role models. You can learn from reading experiences of others…direct experience is not the only acceptable kind of experience. (D. Ruff, personal communication, 13 June, 2008)

From the government leader:

I think it's very hard to make it formulaic…. I really think it comes down to experience and professional judgment and training but that ultimately for all the hard and fast numerical criteria you might create, it has to be done based on a professional judgment at that time.

…ultimately at any disaster of significant magnitude, a responsible executive in the government will be there and that executive should not be entirely passive, even in the presence of professionals, that executive should not pretend to be a professional, it should not try to dictate to the professionals but ultimately the decisions should be those of the executive when you're making critical decisions, obviously with heavy reliance on the professionals but you can't walk away from critical decisions...you don't replace their experienced professional judgment with your less experienced political judgment.

I think the most important thing is to know the personnel who are the professionals in key positions, know their experience and know their capability, because ultimately while you have the power to impose your

judgment, if, in fact, you know and have confidence in the professionals, in their training and their experience, then you're more inclined to act in a cooperative way as opposed to an impositional way.

You can't train someone to make a decision at the time of a crisis. I don't believe. You can't train a political leader, a governor, a mayor to say that, all right, when this happens, this is how you should decide. It's got to be something that comes from a wealth of experience and judgment. What you can train the executive are the institutional capabilities and individual capabilities of the people whose judgment, people whose opinions are going to be critical… (G. Pataki, personal interview, 19 March, 2008)

From the military lawyer:

Although it is not my purpose to comment on the ethics of future war, I would suggest that ethical precepts could prove invaluable in assisting ... policy-makers, and combat leaders to interpret the existing law in the context of new methods and means of warfare. Moreover, ethics can assist them in determining how best to fill normative lacuna in humanitarian law that will become increasingly apparent over time. Thus, I enthusiastically welcome this initiative ... to create a dialogue between the legal and ethics communities. Such a dialogue is essential as we contemplate, and prepare for, 21st-century conflict. (Schmitt, 2002)

Whether it is theologians, military lawyers, fire chiefs or governors, it is their unanimity of belief that not only is the experience and competence, but also the education of the decision makers that is the source of the greatest benefit in times of crisis. It is also worthy of note that they credit the observations of other people and disciplines as being worthy to expand the decision maker's own experience level. The level of acceptance for a concept of an educational program can best be determined by noting that each of the chiefs involved in the scenarios reviewed has strongly supported the development of such a program.

B.   DRAWING INFORMATION FROM OTHER DISCIPLINES

One needs to grasp that the individual homeland security decision maker is not alone. Throughout the other disciplines that have been examined in this paper one finds that the experts resident there have discussed and evaluated the conditions under which Considered Risk Casualties can and have occurred. They discuss the level of tolerance

for such events and the factors that make them acceptable to their disciplines and the societies that they exist within. Some of their observations have been evolving since antiquity and have clearly found acceptance in a number of civilizations. Obviously, the conditions under which people have died throughout the ages and for which different societies had a tolerance were not always conditions that one would equate with the contemporary homeland security discussion. For example, the range of circumstances involved in those instances encompassed not only military events but also religious purposes and even matters of entertainment. It is a way, however, of demonstrating that sensitivity to such matters has varied greatly over time and that the disciplines reviewed therefore, have a deep wealth of knowledge from which to draw their contemporary observations.

At a news conference on the afternoon of September 11, 2001, Mayor Giuliani responded to a question inquiring as to how many people had died by saying in part "...more than we can bear." (James, 2002) Inherent in that comment is the indication that under certain conditions, and within certain numbers, society is capable of accepting losses. It is the understanding of those conditions and their scale in which one discovers and is informed of the decision-making tolerances. As noted several times in this thesis, the right or wrong aspect of the decision and its outcomes was never an element of this review. The purpose here is to conduct a sampling across and within disciplines to determine if there was information there that could be of assistance to the homeland security decision maker regardless of the above tolerances. What was found is that those disciplines exist, and are a rich source of such knowledge for the decision maker.

What has also been revealed is that while such information exists in philosophical, military, medical, ethical, and theological arenas, among others, their observations frequently stay within their own disciplines. Some, such as the medical and ethical fields have significant crossover and observations, but one is far less likely to find it between the philosophical and military environments. The traditional homeland security entities, however, seem to be isolated from the wider group on this topic, and it also must be noted that these other disciplines are in turn equally isolated from homeland security. It is imperative that these largely self-imposed isolations end and their

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inquisitiveness, advice, and counsel expand to meet not only the concepts contained in each other's discipline, but also to inform each of them about the needs and concerns of the other.

There exists a new and relatively untapped use for the centuries of wisdom contained in the humanities and social sciences, just as there is an endless source of experiences and scenarios resident within the multiple entities of homeland security that can legitimately test and serve the otherwise hypothetical observations of the other disciplines. Establishing a means of communication and information sharing between them can be mutually beneficial to all parties concerned.

It is unfortunate, but a reality of current times and cited in numerous warnings from the government and other responsible individuals, that Considered Risk Casualty events can be expected to continue, if not expand, for the foreseeable future. Those individuals, who are in positions of authority and bear responsibility for the safety of the civilian population as well as that of their own personnel, will be tasked with making these most difficult decisions. While they have always recognized that as a condition of their professions, the frequency of and scale on which these decisions will have to be made is currently unknowable. However, the deaths from worldwide terrorism, natural disasters, and "all hazards" have reached proportions that could not have been anticipated or predicted even if few short years ago. Therefore, just as one must recognize the change to society that can result in Considered Risk Casualty events, one must also recognize that the means by which those decisions have been made in the past now need to be modified to meet the current challenge. In the development of this thesis it has been revealed that such decisions are comprised of three segments. From the other disciplines, the various elements that can be considered in decision making is one of those segments. From the fire service comes the necessity for experience being a second segment, and from the military comes the third segment, individual values. These form the foundation of Considered Risk Casualty decision making.

C. RECOMMENDATIONS

1. An educational program should be developed for use by homeland security practitioners and decision makers, particularly within the emergency services, that will serve to assist, support, and inform those decision makers and practitioners in making judgments in Considered Risk Casualty situations.

This program should be applicable to both planning and operational environments, and draw upon the body of knowledge accumulated in other disciplines, particularly the humanities and social sciences. That knowledge should be reviewed to form a syllabus that incorporates an appreciation for the full range of conditions, factors, variables, criteria, and relevant issues that can factor into making decisions appropriate to events management that can involve life and death outcomes.

The results of such a syllabus should enable the decision makers to gain support for and the benefits from the experience of the experts in other disciplines when considering the whole spectrum of solutions possible in a Considered Risk Casualty environment.

2. A structure should be established that creates both a forum and a continuous mechanism for the mutual exchange of knowledge and information between homeland security entities and a complete range of other disciplines that have an expertise about, interest in, and nexus to making decisions about matters that have, or potentially can have, outcomes in matters of life and death.

This process should be designed to be mutually beneficial to both the homeland security policy makers, executives, and operational managers at all levels of government, as well as the humanities, social scientists, researchers, analysts, and academicians whose expertise can inform the practice of decision making for Considered Risk Casualty events. The homeland security personnel should be able to utilize this mechanism to enhance the reliability of their decision making in both the planning and operational environments involving Considered Risk Casualties. The other disciplines should be able to draw upon the actual and practical experiences and conditions found in homeland security and crisis/disaster management events to expand their observations to address actual conditions found in those environments.

IX. SUGGESTIONS FOR FURTHER RESEARCH

The stimulus for this thesis was the author's personal involvement in the events of September 11, 2001 and ongoing reflections about those events. There are certainly numerous issues that trace their genesis to that morning that have been written about and discussed extensively and will continue to be for the foreseeable future that could also have served as a legitimate thesis topic. What continues to draw this author to this topic, however, is its unique array of elements. It is not only fundamental to an analysis of homeland security; it is simultaneously a policy matter, an operational issue, an intellectual topic, an emotional element, and, yes, a controversial problem. Any of these elements would by themselves make this a topic worthy of review, but collectively they present a most compelling area for research.

Subsequent researchers should be aware of the emotional and controversial aspects of this topic as regards any future endeavors that they may choose to bring to the discussion. Decisions that result in life or death are instinctively problematic and controversial. Indeed, on more than one occasion during the research on this thesis, the author had the topic described to him as "taboo;" yet even in those instances, the same individuals strongly encouraged the development of the thesis to proceed inasmuch as it "needed to be brought to a head." The future researcher would be well advised to not fall into the endless debate about the "right or wrong" of the results of these decisions, since that is only knowable through outcome, and serves only to add to the mass of information that already exists about that aspect of the topic. As noted previously in the thesis, what is being discussed here is the type of knowledge and information the decision maker needs in order to make a decision. It well may be that a modicum of the "right/wrong" topic discussions would evaporate if the decision maker had a more complete repository of knowledge to draw upon before making a decision.

This document attempted to discover if there was information available in other disciplines that would help the homeland security decision maker in times of Considered Risk Casualty events. Even a cursory examination revealed that there is a wealth of

information available that involves a number of disciplines outside of homeland security, but that information remains nearly unknown within homeland security circles.

A.   THE HUMANITIES AND SOCIAL SCIENCES

Further research in the other disciplines is fully warranted in that in each of the disciplines examined; it was readily evident that both broader and more in depth commentary and observations are available. This is true both within a particular discipline and across multiple disciplines. Research into multiple scenarios and the continuum of variability in conditions and elements involved in them would be highly valuable for advising a decision maker. Likewise, an analysis of the criteria that make losses appear to be "acceptable" is a critical area for further study. Equally important is an analysis of the issue of scale in these events. For example, if it were decided that an arbitrarily selected number of 100 was the Considered Risk Casualty tolerance in a terror attack on a skyscraper, why would that same number not be applicable in an elementary school?

Situational factors have a major impact on Considered Risk Casualty decisions. Other disciplines should be scoured for their explanations of how to assess a full range of scenarios and conditions, and how they can be thought of, evaluated, and applied singularly and in combination with each other across a spectrum of events that contain the element of life and death situations.

B.   DECISION MAKING

Calculating, intuition, personal experience, values, emotions, motivations, and intentions are just some of the elements that contribute to that "gestalt" moment in Considered Risk Casualty decisions. The new and growing science of decision-making analysis should be examined for the how, when, where, and why decisions of this magnitude are made, particularly in times of great stress. Also worthy of examination is a study of the ability of different individuals to separate themselves from a stressful condition and to recognize the uniqueness of the circumstances they are in and, thereby, enable them to make decisions that they would not have realized or made otherwise.

Discovering the queues that initiate the ability to recognize a Considered Risk Casualty event as it occurs, or preferably before it occurs, in order to make decisions that will save lives sooner is an area of research that can be of untold benefit.

C.   EDUCATION

It is through the educational process that the conditions described in this thesis will be properly addressed. The development of an education methodology that bridges both the environment of the abstract, academic expert, and the difficult and stressful arena of the homeland security planner and operations manager is a process in need of development. An in-depth analysis that distills the experience and observations of those practitioners to gain knowledge of the critical elements that are pivotal to these solutions will provide the substance for Considered Risk Casualty decisions.

Identifying the essence of the principles that create patterns of understanding and acceptance in both the other disciplines and operational arenas where both can be mutually supportive of the other and it will represent an initial step in developing a means to apply these patterns. Educators also need to develop a methodology to teach these diverse ranges of knowledge and experience, whether that is through case studies, classroom exercises, tabletop drills, or field exercises. It will also be necessary to create a process that not only inculcates professional acceptance of this knowledge in all the participants, but also codifies a repeatable measurement of success.

1.   Homeland Security

All agencies, at all levels of government, who are or may become involved in Considered Risk Casualty events planning and/or operations should recognize, support, and make available educational opportunities for their decision-making personnel. Developing a protocol and mechanism that permits this, and that simultaneously establishes a process of liaison with other disciplines outside of homeland security is an important area of future research. Similarly, the creation of a structure that immediately assists and supports Considered at Risk Casualty decision makers during and after such events will be one of the most important areas of study for subsequent researchers.

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LIST OF REFERENCES

Baumgarten, E., and Insco, J. (2001). *Reasoning about bioethics: A manual for the members of the pediatric ethics committee.* Ann Arbor: University of Michigan Health System.

Benjamin, G. C. (2002). Smallpox vaccine policy: the national debate. *Physican Executive*. Retrieved November 1, 2007, from http://findarticles.com/p/articles/mi_m0843/is_5_28/ai_93698411/print.

Centers for Disease Control. (2004, October 5). Interium influenza vaccinations recommendations, 2004-5 influenza season. Retrieved November 1, 2007, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a6.htm.

Creed, P., and Newman, R. (2008). *Firefight, inside the battle to save the pentagon on 9/11.* New York: Random House.

Eisner, H. (2000). *Worcester.* Retrieved July 11, 2008, from http://www.firefouse.com/worcester/eisner.html.

Emanuel, E. J., and Wertheimer, A. (2007, October). Who should get influenza vaccination when not all can? *Vaccine Prioritization during an Influenza Pandemic.* Retrieved November 1, 2007, from http://cipp.gmu.edu/report/cip_reportarch.php.

Franks, F. M. (1996, May-June). Battle command. *Military Review*, 4-25.

Federal Emergency Management Agency. (2002). *World trade center building performance study: Data collection, preliminary observations, and recommendations.* New York: FEMA.

Green, I. (n.d.). *Ethics and SARS: Learning lessons from the toronto experience.* Retrieved November 1, 2007 from, http://www.yorku.ca/igreene/sars.html.

Griffiths, J. F. (2007). Manhattan box 5-5-8087, September 11, 2001. In J. F. Griffths, *Fire Department of New York-an operational reference* (7th ed.). Little Silver, NJ: FDNY.

Grisez, G. (1993). *The way of the Lord Jesus, living a christian life* (Vol. 2). Quincy, IL: Franciscan Press.

Hastings Center. (n.d.). *Flu pandemic and the fair allocation of scarce life-saving resources: how can we make the hardest choices?* Retrieved January 25, 2008, from http://www.thehastingscenter.org/pdf/flu_pandemic_and_the_fair_allocation_of_scarce_life_saving_resources.pdf

Heinrich, J. (2004). *Flu vaccine, recent supply shortages underscore ongoing challenges.* Subcommittee on Health and the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives (GAO-05177T). U. S. Government, United States Government Accountability Office.

James, C. (2002, May 24). TV weekend: a cronicle of horror and hope. *New York Times.* Retrieved August 24, 2008, from htt://query.nytimes.com/gst/fullpage.html?.res=9406E6D61E38F937A15756COA9649C8B6E.

Kamm, F. M. (1985, Spring) Equal treatment and equal choice. *Philosphy and Public Affairs*. Retrieved January 27, 2008, from http://links.jstor.org/sici?sici=00483915%28198521%2914%3A2%3C177%3AETAEC%3E2.0.CO%3B2-6.

Kamm, F. M. (1989). Harming some to save others. *Journal of Philosophical Studies , 57* (3), 227-260.

Kamm, F. M. (1992). Non-consequentialism: the person as an end-in-self and the significance of status. *Philosophy and Public Affairs 21*(4), 354-389. Retrieved January 27, 2008, from http://links.jstor.org/sici?sici=0048-3915%28199223%3A4%3C354%3ANTPAAE%3E2.0.CO%3B2-4.

Kamm, F. M. (1993). *Morality, Mortality*. New York: Oxford University Press

Kamm, F. M. (1998). Moral Intuitions, Cognitive Psychology, and the Harming-Verses-Not-Aiding Distinction. *Ethics , 108* (3), 463-488.

Kamm, F. M. (2000). Does Distance Matter Morally to the Duty to Rescue. *Journal of Law and Philosophy , 19* (6), 655-681.

Kamm, F. M. (2002). Whether to Discontinue Nonfutile Use of a Scarce Resource. *Medicine and Social Justice.* 373-eoc.

Kamm, F. M. (2007). Moral issues in rationing scarce resources. *Contemporary debates in social philosophy* . Boston: Blackwell Publishing.

Kay, A. F. (2004). When the issue is acceptable deaths, taboo or not taboo-that is the question. *The Polling Critic, 36.* Retrieved Feburary 5, 2008, from http://www.cdi.org/polling/36-taboo-casualties.cfm.

Lemon, S. M., Hamburg, M. A., Sparling, F. P., Choffnes, E. R., and Mack, A. (2006, September). Workshop summary. *Ethical and legal considerations in mitigating pandemic disease:Forum on microbial threats*. Retrieved November 16, 2007, from http://books.nap.edu?openbook/0309107695/gifmid/R1.gif.

McKenzie, F. E. (2004). Smallpox models as policy tools. *International Conference on Emerging Infectious Diseases*. Atlanta, GA.

McKinsey and Company. (2002). *Increasing the FDNY's Preparedness.* New York: Fire Department New York.

National Science Foundation. (2002, July) Workshop report. *Integrated Research in Risk Analysis and Decision Making in a Democratic Society*. Arlington, Virginia Retrieved 2008, from http://www.nsf.gov/pubs/2003/nsf03209/nsf03209_1.pdf.

Perl, R. F. (2006) *International terrorism: threat, policy and response*. Retreived 2008, from http://www.fas.org/sgp/crs/terror/RL33600.pdf

Roblyer, D. A. (2005, March). Beyond Precision: Morality, Decision-making, and Collateral Casualties. *Peace and Conflict: Journal of Peace Psychology , 11* (1), 17-39.

Schmitt, M. (2002, January). Ethics and military force: The jus in bello. *Carnegie Council workshop on European and North American perspectives on ethics and the use of force*. Retrieved March 19, 2008 from http://www.cceia.org/resources/transcripts/98.html.

Solomon, W. D. (2001). Double effect. *The Encyclopedia of ethics.* (C. B. Lawrence C. Baker, Ed.) New York, NY: Routledge.

Statistics, N. C. (Ed.). (2008, July). National Center for Health. Retrieved July 2, 2008, from http://www.cdc.gov/nchs/FASTSTATS/deaths.htm.

Stephens, D., and Lewis, M. W. (2005). The law of armed conflict - a contemporary critique. *Melbourne Journal of International Law* , 29.

Temkin, L. (2005). A 'new' principle of aggregation. *Philosophical Issues, Normativity, 15,* 218-234.

University of Toronto Joint Center for Bioethics. (n.d.). *Ethics and SARS: Learning lessons from the Toronto experience.* Retrieved March 10, 2008, from www.yorku.ca: http://www.yorku.ca/igreene/sars.html.

Upshur, R. E. G., Faith, K., Gibson, J.L., Thompson, A.K., Tracy, C.S., Wilson, K., et al. (2005, November). *Stand on guard for thee- Ethical considerations in preparedness planning for pandemic influenza.* Toronto, Ontario: University of Toronto Joint Center for Bioethics – Pandemic Influenza Working Group. Retrieved January 25, 2008, from www.utoronto.ca/JCB/home/documents/pandemi.pdf.

U. S. Department of Health and Human Services. (n.d.). *HSS pandemic influenza plan supplement 6 vaccine distribution and use.* Retrieved November 6, 2007 from http:/www.hhs.gov/pandenicflu/plan/sup6.html#S6-I.

U. S. Department of Justice. (2004). *Bureau of justice statistics.* Retrieved June 2008, from http://www.usdoj.gov/bjs/lawenf.htm.

U. S. Fire Administration. (2008, June). *Fire statistics.* Retrieved June 2008, from http://www.usfa.dhs.gov/statistics/firefighters/index.shtm.

U. S. Government Accounting Office. (2001). *Flu vaccine, supply problems heighten need to ensure access for high-risk people* (GAO-01-624)*.* Washington, D.C.: U.S. Government Accounting Office.

BIBLIOGRAPHY

Association of Immunization Managers. (2005, June 3). Retrieved November 2007 from, http://www.immunizationmanagers.org/pdf/Flu_Vaccine_Shortage.pdf.

Association of State and Territorial Health Officials. (2002, Nov. 5). Retrieved Nov. 2007, from http://www.astho.org/pubs/pandemic/influenza.pdf.

ASTHO. (2002, November). Retrieved 2007, from http://www.astho.org/pubs/pandemic/influenza.pdf.
(2006). Retrieved Nov. 2007, http://www.astho.org/pubs/InfluenzaVaccineShortage.pdf.

Baumgarten, E., and Insco, J. (2001). *Reasoning about bioethics, A manual for the members of the pediatric ethics committee.* University of Michigan Health System.

Benjamin, G. C. (2002). Smallpox vaccine policy: the national debate. *Physican Executive, Health Policy Update.*

Brandon, S. E. (2007). Near-and long-term psychological effects of exposure to terrorist attacks. In L. M. Bruce Bongar (Ed.), *Psychology of terrorism* (p. 492). New York, NY: Oxford University Press.

Centers for Disease Control. (2004, October 5). Interim influenza vaccination recommendations, 2004--05 influenza season. Retrieved November 1, 2007, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a6.htm.

Christopher, P. (1994). *The Ethics of war and peace: An introduction to legal and moral issues.* (J. Tully, Ed.) Englewood Cliffs, NJ: Prentice-Hall.

Creed, P., and Newman, R. (2008). *Firefight, inside the battle to save the pentagon on 9/11.* New York: Random House.

Daniels, N. (1992, April). Retrieved November 2007 from, *http://links.jstor.org/sici?sici+0031-8108%28199204%29101%3A2%3C479%3AAIMPKA%3E2.0.CO.*

Davenport, T., and Prusak, L. (1998). *Working knowledge: How organizations manage what they know.* Boston: Harvard Business School Press.

Delaney, J. B. (n.d.). Retrieved November 1, 2007. *http://www.hsaj.org??fullarticle=3.2.1.*

Delaney, J. B. (2007). The National medical system's reliance on civilian-based medical response teams in a pandemic is unsound. *Homeland Security Affairs Journal , 3* (2).

Directorate of Public Affairs. (2007). *Major Incident Procedure Manual.* London: London Emergency Services Liaison Panel, Metropolitan Police Service.

Economist. (2008, Jan 10). Retrieved Feb. 6, 2008, from http://www.economist.com/world/international/displaystory.cfm?story_id=10499 17.

Edwards, N. A., Caldicott, D., Eliseo, T., and Pearce, A. (2006). Truth hurts - hard lessons from Australia's largest mass casualty exercise with contaminated patients. *Emergency Medicine Australasia 18*, (2), 185-195.

Eisner, H. (2000, October 30). *Worcester.* Retrieved July 11, 2008, from http://www.firefouse.com/worcester/eisner.html.

Emanuel, E. J., and Wertheimer, A. (2007, October). Who should get influenza vaccination when not all can? *Vaccine Prioritization during an Influenza Pandemic*. Retrieved November 1, 2007, from http://cipp.gmu.edu/report/cip_reportarch.php.

Faust, D. G. (2008). *This republic of suffering.* New York: Alfred A. Knopf.

Federal Emergency Management Agency. (2002). *World trade center building performance study: data collection, preliminary observations, and recommendations.* New York: FEMA.

Franks, F. M. (1996, May-June). Battle command. *Military Review* , pp. 4-25.

Gist, R. (2007). Promoting resilience anbd recovery in first responders. In L. M. Bruce Bonger (Ed.), *Psychology of terrorism* (p. 492). New York: Oxford University Press.

Green, I. (n.d.). *Ethics and SARS: Learning lessons from the toronto experience*. Retrieved November 1, 2007 from, http://www.yorku.ca/igreene/sars.html.

Griffiths, J. F. (2007). Manhattan Box 5-5-8087, September 11, 2001. In J. F. Griffths, *Fire Department of New York-an operational reference* (7th ed., p. 267). Little Silver, NJ: FDNY.

Grisez, G. (1993). *The way of the Lord Jesus, living a christian life* (Vol. 2). Quincy, IL: Franciscan Press.

Hastings Center. (n.d.). *Flu pandemic and the fair allocation of scarce life-saving resources: how can we make the hardest choices?* Retrieved January 25, 2008, from http://www.thehastingscenter.org/pdf/flu_pandemic_and_the_fair_allocation_of_scarce_life_saving_resources.pdf.

Immunization Managers. (2005) Retrieved June 2005, from http://www.immunizationmanagers.org/PDFS/Flu_Vaccine_Shortage.pdf.

James, C. (2002, May 24). TV weekend: a cronicle of horror and hope. *New York Times.* Retrieved August 24, 2008, from htt://query.nytimes.com/gst/fullpage.html?.res=9406E6D61E38F937A15756COA9649C8B6E.

Kamm, F. M. (1985, Spring) Equal treatment and equal choice. *Philosphy and Public Affairs*. Retrieved January 27, 2008, from http://links.jstor.org/sici?sici=00483915%28198521%2914%3A2%3C177%3AETAEC%3E2.0.CO%3B2-6.

Kamm, F. M. (1989). Harming some to save others. *Journal of Philosophical Studies , 57* (3), 227-260.

Kamm, F. M. (1991). The doctrine of double effect; Reflections on theoretical and practical issues. *The Journal of Medicine and Philosophy , 16* (5), 571-585.

Kamm, F. M. (1992). Non-consequentialism: the person as an end-in-self and the significance of status. *Philosophy and Public Affairs 21*(4), 354-389. Retrieved January 27, 2008, from http://links.jstor.org/sici?sici=0048-3915%28199223%3A4%3C354%3ANTPAAE%3E2.0.CO%3B2-4.

Kamm, F. M. (1993). *Morality, Mortality*. New York: Oxford University Press

Kamm, F. M. (1998). Moral Intuitions, Cognitive Psychology, and the Harming-Verses-Not-Aiding Distinction. *Ethics , 108* (3), 463-488.

Kamm, F. M. (2000). Does Distance Matter Morally to the Duty to Rescue. *Journal of Law and Philosophy , 19* (6), 655-681.

Kamm, F. M. (2002). Whether to discontinue nonfutile use of a scarce resource. *Medicine and social justice; essays on the distribution of health care* , 373-eoc.

Kamm, F. M. (2007). The Ethics of Killing; Problems at the Margins of Life. *The Philosophical Review, 116* (2), 273-280.

Kamm, F. M. (2007). Moral issues in rationing scarce resources. *Contemporary debates in social philosophy* . Boston: Blackwell Publishing.

Kay, A. F. (2004). When the issue is acceptable deaths, taboo or not taboo-that is the question. *The Polling Critic, 36.* Retrieved Feburary 5, 2008, from http://www.cdi.org/polling/36-taboo-casualties.cfm.

Kirschenbaum, I. (2007, June 19). Retrieved Nov. 3, 2007, from http://blogs.webmd.com/mad-about-medicine/labels/hospital.html.

Lemon, S. M., Hamburg, M. A., Sparling, F. P., Choffnes, E. R., and Mack, A. (2006, September). Workshop summary. *Ethical and legal considerations in mitigating pandemic disease:Forum on microbial threats*. Retrieved November 16, 2007, from http://books.nap.edu?openbook/0309107695/gifmid/R1.gif. (2006). Water, Critical Node Analysis. In T. G. Lewis, *Critical infrastructure protection in homeland security* (pp. 203-207). Hoboken, NJ: John Wiley & Sons.

McGinnis, M. J., and Foege, W. H. (2004). The immediate vs the important. *Journal of the American Medical Association , 291* (10), 1263-1264.

McKenzie, F. E. (2004). Smallpox models as policy tools. *International Conference on Emerging Infectious Diseases*. Atlanta, GA.

McKinsey and Company. (2002). *Increasing the FDNY's Preparedness.* New York: Fire Department New York.

Mirkhah, A. (n.d.). Retrieved Nov. 2007, from http://www.ife-usa.org/attachments/CoreValues-Ozzie%20Article.pdf.

MMWR Dispatch. (2004, Oct.). Interim influenza vaccination recommendations, 2004--05 influenza season. Retrieved Nov 2007, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a6.htm. Centers for Disease Control and Prevention.

Moghaddam, F. (2006). *From the terrorists point of view: What they experience and why they come to destroy.* Westport, CT: Praeger Security International.

National Research Council of the National Academies. (2006). Retrieved Nov. 11, 2007, from http://books.nap.edu/openbook/0309101786/gifmid/R1.gif.

National Science Foundation. (2002, July) Workshop report. *Integrated Research in Risk Analysis and Decision Making in a Democratic Society*. Arlington, Virginia Retrieved 2008, from http://www.nsf.gov/pubs/2003/nsf03209/nsf03209_1.pdf.

Neergaard, L. (2007, November 2). Retrieved November 2, 2007, from
http://apgoogle.com/article/ALeqM5iARkaQtkUoGVHScHJ39Wah63DICA.

Office, U. S. (2001). *Flu Vaccine, Supply Problems Heighten Need to Ensure Access for
High-Risk People.* Washington, DC: GAO.

Orend, B. (2006). *The Morality of war.* (J. Burbidge, Ed.) Peterborough, Ontario:
Broadview Press.

Osterholm, M. T. (2005, July/August). Retrieved Jan. 16, 2008, from
http://www.foreignaffairs.org/20050701faessay84402/micha...sterholm/preparing-
for-the-next-pandemic.html?mode=print.

Paton, D. (2007). Terrorism stress risk assessment and management. In L. M. Bruce
Bonger (Ed.), *Psychology of terrorism* (p. 492). New York: Oxford University
Press.

Perl, R. F. (2006) International terrorism: threat, policy and response. Retreived 2008,
from http://www.fas.org/sgp/crs/terror/RL33600.pdf.

Proctor, R. *Case study, Union County first responder distribution plan.* Master's thesis,
Naval Postgraduate School, Monterey, CA.

Roblyer, D. A. (2005). Beyond precision: morality, decision-making, and collateral
casualties. *Peace and Conflict: Journal of Peace Psychology , 11* (1), 17-39.

Schmitt, M. (2002, January). Ethics and military force: The jus in bello. *Carnegie
Council workshop on European and North American perspectives on ethics and
the use of force.* Retrieved March 19, 2008 from
http://www.cceia.org/resources/transcripts/98.html.

Solomon, W. D. (2001). Double effect. *The Encyclopedia of ethics.* (C. B. Lawrence C.
Baker, Ed.) New York, NY: Routledge.

Statistics, N. C. (Ed.). (2008, July). National Center for Health. Retrieved July 2, 2008,
from http://www.cdc.gov/nchs/FASTSTATS/deaths.htm.

Stephens, D., and Lewis, M. W. (2005). The law of armed conflict - a contemporary
critique. *Melbourne Journal of International Law , 29.*

Taleb, N. (2007). *A black swan: the impact of the highly improbable.* New York: Random
House Publishing Group.

Temkin, L. (2005). A 'new' principle of aggregation. *Philosophical Issues, Normativity,
15,* 218-234.

University of Toronto Joint Center for Bioethics. (n.d.). *Ethics and SARS: Learning lessons from the Toronto experience.* Retrieved March 10, 2008, from www.yorku.ca: http://www.yorku.ca/igreene/sars.html.

Upshur, R. E. G., Faith, K., Gibson, J.L., Thompson, A.K., Tracy, C.S., Wilson, K., et al. (2005, November). *Stand on guard for thee- Ethical considerations in preparedness planning for pandemic influenza.* Toronto, Ontario: University of Toronto Joint Center for Bioethics – Pandemic Influenza Working Group. Retrieved January 25, 2008, from www.utoronto.ca/JCB/home/documents/pandemi.pdf.

U. S. Department of Health and Human Services. (2007, May 15) Retrieved Nov. 16, 2007, from http://www.hhs.gov/pandemicflu/plan/appendixe.html.

U. S. Department of Health and Human Services. (n.d.). HHS pandemic influenza plan. Retrieved Nov 16, 2007, from http://www.hhs.gov/pandemicflu/plan/appendixd.html.

U. S. Department of Health and Human Services. (n.d.). *HSS pandemic influenza plan supplement 6 vaccine distribution and use.* Retrieved November 6, 2007 from http:/www.hhs.gov/pandenicflu/plan/sup6.html#S6-I.

U. S. Department of Housing and Urban Development. (2005, April). Hudclips. Retrieved Nov. 2007, from http://www.hudclips.org?sub_nonhud/cgi/pdfforms/240025g4.doc.

U. S. Department of Justice. (2004). *Bureau of justice statistics.* Retrieved June 2008, from http://www.usdoj.gov/bjs/lawenf.htm.

U. S. Fire Administration. (2008, June). *Fire statistics.* Retrieved June 2008, from http://www.usfa.dhs.gov/statistics/firefighters/index.shtm.

U. S. Government Accounting Office. (2001). *Flu vaccine, supply problems heighten need to ensure access for high-risk people* (GAO-01-624). Washington, D.C.: U.S. Government Accounting Office.

Walzer, M. (1977). *Just and unjust wars.* New York: Basic Books.

Webber, R. A. (2004). *Identifying alternative approaches to fire and hazard protection at proctor and gamble.* Cincinnati: National Fire Academy.

Welton, E. (2004). *Vaccine policy and program implementation: individual rights vs. public health.* Student paper, Naval Postgraduate School, Monterey, CA.

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